



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

### Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

### About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>





F con 6680.8



**Harvard College Library.**

FROM THE

**UNITED STATES GOVERNMENT**

THROUGH

7 Sept. 1898.











REPORT  
UPON THE  
COMMERCIAL RELATIONS  
OF THE  
UNITED STATES  
WITH  
FOREIGN COUNTRIES  
FOR  
THE YEAR 1879.

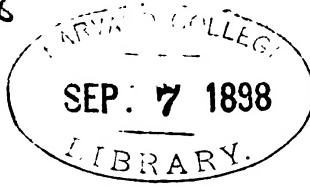
---

VOLUME II.

WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1880.

~~49.73~~

Econ 6680.8



# EUROPE.

## SWEDEN AND NORWAY.

### SWEDEN.

(The following seven tables, showing the commerce and navigation of Sweden, were prepared by Consul Oppenheim, of Gothenburg, from statistical publications published by the Royal College of Commerce at Stockholm.)

1.—Statement showing the foreign trade of Sweden during the calendar years 1876 and 1877.

Articles.	1876.		1877.	
	Imports.	Exports.	Imports.	Exports.
	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Live animals.....	951,363	4,572,291	992,539	6,429,888
Provisions (animal foods).....	27,764,818	7,976,677	25,963,576	8,690,873
Bread and breadstuffs.....	21,043,604	45,366,857	45,033,444	29,301,841
Tea, coffee, spices, and other colonial products.....	46,956,749	51,650	47,542,829	98,045
Fruits and garden produce.....	4,169,340	222,315	2,641,432	183,850
Liquors, wines, &c.....	5,185,257	309,574	5,287,344	327,998
Cotton, wool, jute, and other raw textiles.....	22,008,705	201,921	19,844,579	351,004
Yarn, thread, &c.....	10,564,058	282,197	8,405,265	372,426
Textile manufactures.....	41,099,223	2,059,255	44,058,816	2,721,996
Hair, feathers, skins, bone, horn, &c., raw.....	16,782,143	596,529	14,188,163	932,151
Manufactures of hair, feathers, skins, &c.....	1,574,956	102,925	1,594,186	64,880
Tallow, oils, tar, gums, and kindred products.....	11,207,250	1,090,823	10,443,240	811,407
Manufactures of tallow, oils, gums, &c.....	1,486,618	181,846	2,148,063	268,679
Wood, unmanufactured, sawn or hewn.....	1,084,296	103,945,956	1,016,127	113,401,645
Manufactures of wood.....	1,152,720	11,215,817	1,265,315	10,000,196
Dyes and dye-stuffs.....	2,346,269	168,051	2,355,635	259,813
Miscellaneous vegetable products.....	6,238,150	826,961	8,155,266	826,737
Paper and stationery.....	2,537,993	4,358,801	2,884,691	3,888,945
All other manufactures of vegetable origin.....	188,819	13,232	188,907	27,289
Minerals:				
Raw.....	*21,483,290	1,642,374	19,538,009	1,262,117
Manufactures of.....	2,675,233	690,711	2,886,566	845,621
Metals:				
Unworked or partly worked.....	11,084,474	34,872,987	9,035,940	31,464,681
Manufactures of.....	9,280,010	1,079,412	11,207,750	948,674
Vessels, carriages, machinery, instruments, &c.....	16,966,088	1,280,581	12,993,474	1,008,041
Gold and silver coin.....	2,526,264	2,150,000	661,318	720,000
All articles not included in above groups.....	2,007,067	740,162	2,087,826	706,463
Total.....	290,364,653	226,239,205	303,420,300	215,912,700

2.—Statement showing values of the imports and exports of Sweden, by countries, for the calendar years 1876 and 1877.

Countries from which imported and to which exported.	Imports.		Exports.		Total commerce.	
	1876.	1877.	1876.	1877.	1876.	1877.
	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Norway.....	16,745,000	14,902,000	6,977,000	6,687,000	23,722,000	21,589,000
Arctic seas.....	189,000	319,000			189,000	319,000
Russia.....	23,700,000	38,561,000	4,676,000	4,445,000	27,376,000	43,006,000
Denmark.....	50,609,000	49,424,000	23,590,000	22,244,000	74,199,000	71,668,000
Germany.....	57,865,000	67,349,000	16,403,000	13,608,000	74,268,000	80,957,000
Holland.....	10,836,000	12,099,000	11,665,000	10,592,000	22,601,000	22,691,000

## 2.—Statement showing values of the imports and exports of Sweden, &amp;c.—Continued.

Countries from which imported and to which exported.	Imports.		Exports.		Total commerce.	
	1876.	1877.	1876.	1877.	1876.	1877.
	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Belgium .....	9, 124, 000	9, 359, 000	9, 619, 000	8, 088, 000	18, 743, 000	17, 442, 000
England .....	98, 300, 000	87, 281, 000	120, 258, 000	116, 613, 000	218, 558, 000	208, 894, 000
France .....	11, 801, 000	9, 287, 000	25, 335, 000	24, 943, 000	36, 336, 000	34, 230, 000
Portugal .....	1, 037, 000	1, 194, 000	1, 511, 000	1, 673, 000	2, 548, 000	2, 867, 000
Spain .....	1, 148, 000	1, 229, 000	2, 480, 000	2, 216, 000	3, 628, 000	3, 445, 000
Gibraltar and Malta .....		2, 000	165, 000	251, 000	165, 000	253, 000
Italy .....	1, 261, 000	1, 116, 000	323, 000	318, 000	1, 584, 000	1, 434, 000
Austria .....	13, 000	283, 000	18, 000	18, 000	31, 000	301, 000
Turkey .....				41, 000		41, 000
Egypt .....			200, 000	102, 000	200, 000	102, 000
Algeria .....			569, 000	828, 000	569, 000	828, 000
Cape of Good Hope and South Africa .....			512, 000	595, 000	512, 000	595, 000
Other parts of Africa .....				49, 000		49, 000
East Indies, China, and Japan .....	179, 000	664, 000	8, 000	144, 000	187, 000	808, 000
Australia .....			642, 000	1, 320, 000	642, 000	1, 320, 000
United States .....	5, 576, 000	6, 911, 000	811, 000	705, 000	6, 387, 000	7, 616, 000
West Indies .....	1, 141, 000	990, 000	27, 000	38, 000	1, 168, 000	1, 028, 000
Brazil .....	1, 127, 000	1, 300, 000	421, 000	398, 000	1, 548, 000	1, 698, 000
Other parts of America .....	814, 000	1, 150, 000	29, 000	12, 000	843, 000	1, 162, 000
Total .....	290, 365, 000	303, 420, 000	226, 239, 000	215, 913, 000	516, 604, 000	519, 333, 000

## 3.—Statement showing freights earned by Swedish vessels engaged in foreign navigation during the calendar years 1876 and 1877.

Countries traded with.	Gross freights earned.						Total 1876.	Total 1877.
	On voyages from Swedish ports to foreign countries.		On voyages from foreign countries to Swedish ports.		On voyages between foreign ports.			
	1876.	1877.	1876.	1877.	1876.	1877.		
	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Russia .....	124, 535	133, 592	481, 897	1, 206, 164	1, 519, 478	833, 620	2, 125, 910	2, 173, 376
Denmark .....	1, 475, 197	1, 115, 007	315, 871	338, 135	1, 015, 351	1, 025, 013	2, 806, 419	2, 478, 155
Germany .....	1, 507, 193	1, 273, 280	868, 393	921, 584	1, 979, 045	2, 026, 507	4, 354, 631	4, 221, 371
Holland .....	387, 846	329, 940	144, 146	183, 830	828, 875	933, 615	1, 360, 867	1, 447, 385
Belgium .....	563, 437	736, 112	154, 951	165, 991	878, 890	648, 180	1, 507, 278	1, 550, 223
England .....	6, 763, 878	6, 701, 094	2, 944, 944	2, 497, 842	5, 179, 014	5, 287, 752	14, 887, 836	14, 486, 688
France .....	1, 543, 842	1, 544, 648	485, 400	450, 638	1, 542, 453	1, 878, 116	3, 571, 695	3, 873, 402
Portugal .....	258, 516	319, 482	204, 743	280, 352	210, 798	303, 714	674, 057	903, 548
Spain .....	381, 794	280, 299	167, 254	183, 592	463, 647	381, 028	1, 012, 695	854, 919
Gibraltar .....	22, 950	6, 222			4, 500	1, 800	27, 450	8, 022
Italy .....	96, 636	46, 098	107, 598	83, 932	261, 335	246, 269	465, 569	376, 299
Austria .....	5, 002			22, 857	102, 457	67, 996	107, 459	90, 853
Turkey .....					16, 200	27, 630	16, 200	27, 630
Egypt .....	50, 994	60, 012			20, 340	18, 500	71, 334	73, 512
Algeria .....		34, 776				41, 616		76, 392
Other parts of Africa .....	217, 188	159, 894			356, 292	94, 878	573, 480	254, 772
East Indies, China, and Japan .....		13, 482			154, 214	3, 427, 704	154, 214	3, 441, 186
Australia and Polynesia .....	107, 604	358, 580			178, 513	12, 852	286, 117	371, 412
British North America .....					35, 550	5, 760	35, 550	5, 760
United States .....	48, 672	12, 960	100, 170	90, 090	379, 566	318, 528	528, 408	421, 578
West Indies .....					87, 194	62, 081	87, 194	62, 081
Brazil .....	118, 872	64, 548		13, 680	811, 818	715, 980	930, 690	794, 214
La Plata countries .....					347, 148	373, 446	347, 148	373, 446
Other parts of South America .....					67, 216	68, 782	67, 216	68, 782
All other countries .....	27, 975					2, 034	27, 975	2, 034
Total .....	13, 702, 131	13, 190, 006	5, 975, 367	6, 438, 627	16, 439, 894	18, 798, 407	36, 117, 392	38, 427, 040

In 1876 steam-vessels earned 12, 178, 232 crowns, or 33.72 per cent.  
 In 1877 steam-vessels earned 12, 169, 061 crowns, or 31.67 per cent.

4.—Statement showing the value of the imports and exports of Sweden for the ten years 1868–1877, and proportions thereof carried in Swedish and foreign vessels.

## IMPORTS.

Year.	Carried in—								Total in Swedish crowns.
	Swedish vessels.		Norwegian vessels.		Other foreign vessels.		Land vehicles.		
	Swedish crowns.	Per cent.	Swedish crowns.	Per cent.	Swedish crowns.	Per cent.	Swedish crowns.	Per cent.	
1868	67,063,000	48.69	8,363,000	6.07	60,624,000	44.01	1,690,000	1.23	137,740,000
1869	69,138,000	50.60	8,573,000	6.28	56,732,000	41.53	2,172,000	1.59	136,615,000
1870	67,045,000	47.32	11,874,000	8.38	60,496,000	42.70	2,271,000	1.60	141,688,000
1871	86,138,000	50.92	8,886,000	5.25	71,532,000	42.28	2,623,000	1.55	169,179,000
1872	106,093,000	49.03	10,852,000	5.03	95,620,000	44.19	3,801,000	1.75	216,366,000
1873	145,743,000	53.69	14,118,000	5.20	105,328,000	38.80	6,251,000	2.81	271,440,000
1874	165,970,000	54.09	13,244,000	4.32	119,662,000	39.00	7,934,000	2.59	306,810,000
1875	139,366,000	51.99	10,812,000	4.08	111,424,000	41.57	6,464,000	2.41	268,066,000
1876	155,813,000	53.67	15,997,000	5.50	111,271,000	38.32	7,284,000	2.51	290,365,000
1877	159,871,000	52.69	16,043,000	5.29	120,861,000	39.83	6,645,000	2.19	303,420,000

## EXPORTS.

1868 .....	44,143,000	36.93	27,753,000	23.22	45,757,000	38.28	1,871,000	1.57	119,524,000
1869 .....	46,894,000	37.25	25,650,000	20.38	51,192,000	40.66	2,147,000	1.71	125,883,000
1870 .....	57,251,000	37.54	32,099,000	21.05	61,452,000	40.30	1,700,000	1.11	152,502,000
1871 .....	59,966,000	37.24	34,746,000	21.57	64,631,000	40.14	1,690,000	1.05	161,023,000
1872 .....	74,822,000	37.45	44,325,000	22.18	79,030,000	39.55	1,638,000	0.82	199,815,000
1873 .....	96,202,000	43.35	45,909,000	20.64	78,189,000	35.24	1,704,000	0.77	221,804,000
1874 .....	103,592,000	44.40	40,729,000	17.45	86,291,000	37.02	2,620,000	1.13	233,332,000
1875 .....	84,524,000	40.92	33,593,000	16.26	85,687,000	41.49	2,748,000	1.33	206,552,000
1876 .....	94,542,000	41.79	39,885,000	17.66	89,439,000	39.53	2,302,000	1.02	226,239,000
1877 .....	84,600,000	39.18	40,808,000	18.90	87,573,000	40.56	2,932,000	1.36	215,913,000

5.—Statement showing the quantities and values of cereals and breadstuffs imported into Sweden during the years 1876 and 1877.

Articles.	Quantities.		Values.	
	1876.	1877.	1876.	1877.
	Swedish centners.	Swedish centners.	Swedish crowns.	Swedish crowns.
Wheat .....	103,606	191,431	756,327	1,416,588
Rye .....	1,454,949	3,141,174	7,274,750	16,752,931
Barley .....	146,252	513,010	905,373	3,236,850
Barley malt .....	14,410	14,338	96,070	95,586
Oats .....	30,813	34,108	179,744	159,173
Indian corn .....	116,650	100,217	466,002	601,802
Pulse and miscellaneous grains .....	8,832	56,899	37,061	332,551
Grits, of all kinds .....	1,836	7,604	16,394	55,254
Wheat flour .....	501,552	823,234	5,767,848	11,525,276
Rye flour .....	803,731	1,795,417	4,621,453	9,874,959
All other flours .....	8,312	14,948	50,174	89,907
Bread and biscuit .....	8,385	13,130	209,623	323,282
Other farinaceous preparations .....	78,654	103,064	661,583	664,800
Total .....	3,277,982	6,808,504	21,043,604	45,033,444

NOTE.—The Swedish centner is equal to 93.72 pounds avoirdupois.



6.—Statement showing the quantities and values of cereals and breadstuffs exported from Sweden during the years 1876 and 1877.

Articles.	Quantities.		Values.	
	1876.	1877.	1876.	1877.
	<i>Swedish centners.</i>	<i>Swedish centners.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Wheat.....	315, 879	114, 240	2, 805, 917	845, 372
Rye.....	66, 806	152, 979	408, 254	883, 878
Barley.....	729, 114	641, 351	4, 339, 963	3, 817, 568
Barley malt.....	195	1, 043	1, 302	6, 954
Oats.....	6, 316, 177	4, 468, 801	36, 844, 367	22, 344, 003
Pulse and miscellaneous grains.....	141, 333	23, 201	794, 800	148, 946
Grits, of all kinds.....	1, 496	2, 521	12, 164	21, 787
Wheat flour.....	62, 708	53, 086	533, 018	796, 290
Rye flour.....	10, 017	50, 378	62, 606	327, 457
All other flours.....	35	292	210	1, 736
Bread and biscuit.....	801	926	20, 032	23, 168
Other farinaceous preparations.....	1, 417	8, 160	44, 224	84, 732
Total.....	7, 645, 977	5, 516, 978	45, 866, 857	29, 301, 841

7.—Statement showing the revenue from customs upon merchandise imported into Sweden for the ten years 1868–1877, and the amounts collected at the principal ports of entry.

Port of entry.	1868.	1869.	1870.	1871.	1872.
	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Stockholm.....	5, 109, 937	4, 959, 710	5, 558, 590	7, 113, 502	7, 509, 072
Gothenburg.....	4, 868, 987	4, 737, 524	5, 130, 026	5, 951, 303	5, 899, 735
Malmö.....	968, 958	969, 609	1, 199, 280	1, 501, 518	1, 681, 894
Norköping.....	487, 654	477, 175	609, 202	683, 688	700, 412
Landskrona.....	463, 977	317, 434	490, 842	374, 600	351, 051
Gefle.....	220, 911	185, 508	238, 513	322, 340	326, 109
Helsingborg.....	190, 383	185, 008	255, 104	367, 837	388, 270
Sundsvall.....	114, 920	156, 723	208, 338	276, 296	309, 418
Carlstad.....	96, 413	107, 281	124, 694	209, 414	248, 138
Carlskrona.....	149, 318	128, 683	186, 872	172, 638	158, 432
Carlshamn.....	197, 674	105, 193	117, 820	143, 687	133, 193
Calmar.....	173, 613	136, 143	152, 042	177, 616	177, 022
Jönköping.....	73, 563	65, 274	72, 861	98, 143	119, 907
Halmstad.....	85, 658	74, 032	87, 130	114, 377	117, 718
Ystad.....	122, 601	106, 681	119, 622	126, 449	114, 285
Linköping.....					
Uddevalla.....	43, 276	32, 081	32, 805	38, 018	43, 440
Hernösand.....	15, 631	42, 665	38, 954	60, 467	88, 585
Hudikewall.....	38, 350	43, 312	51, 780	77, 595	63, 375
Christianstad.....	121, 396	95, 204	95, 366	100, 462	100, 506
Twenty-seven other ports.....	434, 320	420, 142	372, 864	478, 286	497, 451
Total.....	13, 977, 549	13, 345, 377	15, 082, 705	18, 368, 186	18, 517, 966

## 7.—Statement showing the revenue from customs upon merchandise, &amp;c.—Continued.

Port of entry.	1873.	1874.	1875.	1876.	1877.
	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>	<i>Swedish crowns.</i>
Stockholm .....	9, 167, 285	12, 586, 947	9, 325, 591	9, 899, 684	10, 174, 779
Gothenburg .....	6, 996, 969	7, 324, 813	6, 968, 373	7, 063, 764	7, 392, 094
Malmö .....	2, 117, 105	2, 303, 158	2, 139, 865	2, 151, 825	2, 169, 761
Norköping .....	765, 603	944, 678	842, 573	848, 017	921, 745
Landskrona .....	419, 933	478, 798	602, 193	508, 332	609, 174
Gefle .....	510, 589	621, 960	429, 151	590, 088	530, 064
Helsingborg .....	447, 096	404, 537	427, 641	487, 325	485, 748
Sundswall .....	405, 345	399, 924	334, 717	453, 607	406, 282
Carlstad .....	302, 483	369, 006	362, 069	328, 320	332, 044
Carlskrona .....	180, 003	223, 690	236, 518	256, 415	291, 380
Carlshamn .....	194, 568	194, 476	221, 136	236, 403	237, 183
Calmar .....	203, 358	206, 734	192, 466	212, 901	220, 985
Jönköping .....	144, 649	209, 878	194, 483	220, 623	219, 284
Halmstad .....	156, 655	164, 453	153, 004	159, 719	161, 033
Ystad .....	142, 237	146, 119	147, 893	209, 290	153, 219
Linköping .....			100, 665	118, 636	114, 681
Uddevalla .....	31, 708	64, 496	66, 150	80, 314	107, 941
Hernösand .....	100, 491	68, 258	76, 327	61, 787	100, 161
Hudiksvall .....	83, 046	92, 043	73, 562	83, 961	98, 562
Christianstad .....	131, 653	122, 876	116, 698	103, 673	94, 651
Twenty-seven other ports .....	633, 400	655, 431	553, 746	633, 271	612, 680
Total .....	23, 134, 175	28, 594, 292	23, 592, 802	25, 305, 975	25, 524, 061

ERNEST L. OPPENHEIM.

UNITED STATES CONSULATE, Gothenburg, October 1, 1879.

## CHRISTIANIA.

*Report, by Consul Gade, on the commerce of Christiania for the year ending September 30, 1879.*

## TRADE WITH THE UNITED STATES.

*Exports.*—During the past year, ending September 30, 1879, the total exports to the United States from this port amounted to \$14,804.33, and consisted of the following articles:

Books .....	\$3, 946 95
Cod-liver oil .....	7, 533 79
Razors .....	2, 104 13
Anchovies .....	406 03
Rags .....	813 43
Total .....	14, 804 33

*Imports.*—Besides large quantities of provisions, most of which were imported over England, petroleum, leather, rye, agricultural implements, and many other articles of less importance, were imported here from the United States.

Trichina having been found in American bacon and hams, a public examination of goods of this description was ordered.

With the exception of the United States Steamer Enterprise, Captain Selfridge, the American flag has not appeared in these waters during the year.

*Dullness of trade.*—The year 1878 was anything but favorable to the trade and commerce of this country. Almost all branches of industry labored under great difficulties, and protection of home industries is earnestly demanded.

**Tariff.**—To consider a revision of the tariff and duty laws, and at the same time possibly the introduction of ad valorem duties instead of the existing specific duties on imports, a royal commission, consisting of manufacturers and other competent men, has lately been appointed. The custom duties will probably be increased by the next session of the storting to meet the deficits of the budget, and probably an income tax be levied. The duties collected on imports and exports amounted as follows:

In 1878 .....	\$4, 446, 359
In 1877 .....	4, 973, 368
In 1876 .....	4, 718, 960

During the current year there has been a considerable decrease in the import trade and in the duties paid into the treasury.

**Emigration.**—In consequence of the dull times here and the revival of business in America, emigration has again received an impulse. Up to this date 5,130 persons have this year left this port for the United States.

**Lumber.**—The staple of this district is lumber, of which England consumes the greater part. As at present the shipments of timber consist principally of very narrow boards, the price of which are quoted very low in London, there is no profit for Norwegian exporters.

**Railroads.**—In July last a new railroad line, connecting Norway with Sweden, over Fredrikshald, was opened by the King. The first train crossing the frontier was drawn by one of the four American engines ordered from the Baldwin Locomotive Works at Philadelphia.

In August a new cable was laid between the Norwegian coast, near the port of Arendal and Germany. The work was done by an English company, on the order of the German Government.

GERHARD GADE.

UNITED STATES CONSULATE,  
Christiania, October 29, 1879.

## — GOTHENBURG.

*Report, by Consul Oppenheim, on the commerce and industries of the district of Gothenburg, for the year ending June 30, 1879.*

I have the honor to transmit herewith a return of navigation of the port of Gothenburg for the year ending June 30, 1879. For the commercial movement between this consular district and the United States I beg to refer to tables Nos. 2, 3, and 4, herewith inclosed.

### IMPORTS FROM THE UNITED STATES.

In statement No. 4 will be found only such commodities as were ascertained to be of American origin. As regards cotton, tobacco, and sole-leather, the receipts of every importing-house were subjected to expert examination, in order to eliminate the portion not of American production, and it is believed that the figures as presented are very nearly accurate. The total imports of cotton for the year were 28,585 bales, of which 12,511 were of American growth; upon the basis of 375 pounds per bale for East Indian and 450 pounds for American, 48.30 per cent. of the total import was American, which is an increase of about 3 per cent. over last year. Many articles of American manufacture, such as spades, shovels,

axes, clocks, machinery, &c., were imported into this district, but as these goods all come by way of England they are entered at the custom-house as imports from that country. The estimate of the value of these articles found in Table No. 4 is based, first, upon figures representing the actual purchases of the five leading firms importing such goods; second, upon an estimate of the probable amount imported by all the others. This latter amount has been set down at \$12,864.

#### RAILROAD SPECULATION AND ITS EVIL RESULTS.

The year ending June 30, 1879, has been characterized by great commercial and industrial depression in this consular district, as well as through the country at large. The high prices for iron and timber prevailing during the flush times of four to five years ago induced an abnormal development in these industries, accompanied by a popular craze for the building of railways, most of which were many years in advance of the needs of the country. The great ease in money and the general prosperity of the commercial classes induced the formation of many stock companies for these and similar purposes. At the high tide of this mania for development came a great falling off in demand, and consequent depression in prices of the principal Swedish products—iron, timber, and oats. There was a great accumulation of these commodities in the hands chiefly of weak holders, expecting a rally or a renewed demand, which was not forthcoming. This state of things had reached its culminating point last fall, and in the month of November there occurred some heavy failures among the iron merchants, followed by others in the lumber-exporting and banking business. Messrs. N. M. Höglund & Co. and Messrs. Godemiss & Co., of Stockholm, two of the oldest firms in the country, and reputed among the wealthiest, were among the first who had to succumb. Early in January of this year this was followed by the failure of the Göteborg's Handels Kompani and the Rosendahl's Fabriker Bolag, of this city, the first being a large financial institution and the other the heaviest manufacturing corporation in Western Sweden. The Handels Kompani's failure was ascribed to advances made to timber companies, small railroads, and manufacturing concerns, the aggregate amount of such advances being utterly beyond the limits of safety, in view of the institution's financial means. This same company about three years ago had been intrusted with the fiscal agency of the Bergslaget Railway, involving the placing of the half of a loan of £2,000,000, to be used in finishing this road. Said road running from Gothenburg to Fahlun, in Dalarue (about 300 English miles), intersects important mining and timber districts, and is altogether the most important work of internal improvement ever carried out by private capital in this country. When the crash came, it was found that about 15,000,000 kroner of the railroad company's bonds had been hypothecated by the Handels Kompani, chiefly with English bankers, and there was great alarm felt as to the effect of this failure upon the completion of the road. In this emergency the Swedish Diet was appealed to, and was induced to take for state account 6,000,000 kroner of these bonds, making, with the 5,000,000 kroner originally subscribed by the state, a total of 11,000,000 kroner of public money invested in this enterprise. This will insure the completion of this important work, and the railroad will be opened for through traffic on the 1st day of December of this year.

The Diet was at the same session also called upon to meet an estimated deficit in the budget for the calendar year 1880, amounting to

about 8,000,000 kroner. By "deficit" is here meant the difference between the estimated ordinary receipts and the ordinary expenses; such a difference occurs in every budget, and it is usually met by the imposition of an income tax; it had, however, heretofore rarely exceeded 4,000,000 kroner. It was decided to increase the last income tax by 50 per cent., making the amount derived from this source 6,000,000 kroner, leaving the remaining 2,000,000 kroner to be raised by additional customs and excise dues. Under these circumstances there was an opportunity offered to the "protectionist" party in the Diet to propose legislation advancing their policy, but their efforts were unsuccessful. Among the rejected bills was one increasing the duty upon sole-leather from 6 öre to 10 öre per pound; this was designed as a protection to home tanners against the growing influx of American leather, and was defeated by only seven votes in joint convention of both houses. It is therefore likely that the bill will be brought forward again next session. The changes actually made in fiscal matters are all purely for revenue; they consist of an increase of duty on the following articles:

1. Raw sugars, from 8 to 10 öre per pound; refined sugars, from 12 to 14 öre per pound; leaf tobacco, from 29 to 42 öre per pound; manufactured tobacco, from 35 to 50 öre per pound; coffee, from 10 to 11 öre per pound.

2. Liquors in barrels, from 1.30 to 1.50 kroner per kanna;\* liquors in bottles, from 2 to 2.36 kroner per kanna.

On home manufactured spirits the excise is raised from 80 to 100 öre (1 kroner) per kanna.

#### LABOR TROUBLES.

For the first time in many years, there was serious trouble among the laborers in the timber districts. Wages last winter had been brought down to the lowest possible limit, and when the timber fleet came up in the spring a general strike took place, extending to about 7,000 workmen. This was in many respects an extraordinary movement, and it was at first conducted in such a way as to elicit great sympathy for the strikers, the men having daily religious open-air meetings while being idle, and preventing any drunkenness or other practices tending to a breaking of the peace.

The demand was only for an advance of ten öre (2.68 cents) per day, but it was stubbornly resisted by the employers, and upon some of the workmen returning to work at the old rates there were violent demonstrations made. The situation seemed at one time serious enough to induce the provincial authorities to call upon the general government for military aid. A battalion of the royal guard and some other troops were sent to Sundswall, and their presence had the effect of restoring quiet without having resort to the employment of actual force.

#### CROPS.

The crops have again been very plentiful throughout the country, and it is chiefly owing to this that great distress among the laboring classes has been avoided. The yield of the chief food staples for the year 1878 is officially reported as follows:

	Kub. foot.	Bushels.
Wheat .....	4,822,500	= 3,472,000
Rye .....	27,275,800	= 19,637,000
Barley .....	22,571,000	= 16,250,000
Oats .....	78,520,000	= 56,530,000

\* The Swedish kanna is equal to 0.6912 wine gallon.



There was also a most abundant crop of hay, of potatoes, and other roots. The export of oats up to the 1st of September, 1879 (being the surplus for the year 1878) was about 14,400,000 bushels. The crop of 1879 is thought to be fully equal to the one of last year, and this, in connection with the increased demand from England and the United States for iron, has had a most excellent effect in improving the commercial outlook for the coming year.

## FREIGHTS TO THE UNITED STATES.

Freights to the United States have ruled unusually low, iron being carried at from 12 to 16 shillings per ton by steamer via England, and at 8 to 10 shillings by sail direct.

ERNEST L. OPPENHEIM.

## UNITED STATES CONSULATE.

Gothenburg, October 1, 1879.

*Statement showing quantities and values of the declared exports from the consular district of Gothenburg to the United States, during the year ending June 30, 1879.*

Articles.	Quantities.	Values in U. S. gold.
Pig-iron .....	tons.. 120	\$2,751 57
Blooms .....	do... 649	28,613 07
Bar-iron .....	do... 10,801	527,309 33
Wire rods .....	do... 2,335	140,115 71
Bessemer bars .....	do... 31	2,105 01
Bessemer steel rods .....	do... 61	4,424 34
Martin bars .....	do... 1	78 38
Martin-Siemens bars .....	do... 611	43,240 30
Calfskins, untanned .....	.....	1,371 65
Swedish punch .....	dozen bottles.. 30	111 07
Printed books .....	.....	235 66
Miscellaneous .....	.....	52 56
Total .....	.....	748,408 65

Of the above exports, 409 tons of bar-iron, of a value of \$19,756.24, went out in an American ship, the rest being all carried in foreign bottoms.

*Statement showing the quantities and values of direct imports from the United States to the port of Gothenburg, for the year ending June 30, 1879.*

Articles.	Quantities.	Values, exclusive of freight.
Cotton .....	bales.. 7,726	\$375,580
Bacon .....	boxes.. 2,125	62,156
Naphtha .....	barrels.. 2,354	9,416
Petroleum .....	do... 8,953	41,188
Total value .....	.....	488,335

Of the above imports, 1,942 barrels of petroleum, of a value of \$10,719, came in an American vessel, the rest being all carried in foreign bottoms.

*Statement showing quantities and values of American products imported into Gothenburg from other than United States ports, during the year ending June 30, 1879.*

Articles.	Quantities.	Values, exclusive of freight.
Cotton.....	bales..... 4,735	\$228,700
Bacon.....	boxes..... 21,715	635,164
Petroleum, refined *.....	barrels..... None.	.....
Naphtha.....	do..... 96	384
Lard.....	tierces..... 434	13,292
Indian corn.....	bushels..... 1,609	805
Tobacco, leaf.....	pounds, avoirdupois..... 2,393,574	311,164
Tobacco stems.....	do..... 466,335	11,658
Sole-leather.....	do..... 970,090	194,018
Tools, utensils, and agricultural implements.....	.....	49,312
Total value.....	.....	1,444,497

\* All the petroleum imported this year came directly from the United States; this never occurred before.

† Imports of five leading firms ascertained; imports of all others estimated. *Vide Report.*

Statement showing the navigation at the port of Gothenburg for the year ending June 30, 1879.

Flag of—	From or to—	ENTERED.				CLEARED.							
		Steamers.		Sailing vessels.		Steamers.		Sailing vessels.					
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.				
Sweden	Great Britain	303	129,560	36	6,451	339	138,011	317	128,910	128	25,128	445	154,038
	Germany	235	63,627	54	8,291	289	71,908	45	13,208	6	13,767	51	13,767
	Belgium	48	17,544	14	3,470	62	21,023	47	16,985	16	3,927	63	19,912
	France	45	16,541	22	4,483	67	21,024	56	18,539	20	13,892	77	28,431
	Russia	65	18,684	5	4,787	70	19,481	67	18,026	5	1,892	112	19,118
	Norway	87	23,627	40	5,628	127	28,253	106	27,870	4	297	170	27,467
	Holland	25	8,725	9	8,725	25	8,725	14	4,637	3	378	17	5,871
	Spain	3	1,873	123	17,366	128	18,491	170	43,792	15	3,150	5	45,191
	Denmark	5	1,125	27	5,511	31	6,860	3	1,073	5	3,150	8	2,383
	Italy	4	1,349	26	6,457	27	6,075	1	126	7	2,167	8	2,383
	United States	1	218	45	8,162	145	56,530	104	50,334	52	7,903	136	58,237
England	All other countries	100	48,428	2	1,122	2	1,122						
	United States	18	8,257	12	1,656	30	9,913	14	6,385	4	556	14	6,385
Denmark	Denmark	220	66,544	25	3,881	245	70,375	213	64,079	61	9,831	94	22,107
	All other countries	28	10,586	40	5,770	68	16,356	33	12,276	52	6,468	75	13,230
Norway	Norway	25	7,121	76	9,481	101	16,902	23	6,762	9	2,972	9	2,972
	United States	38	11,482	22	4,446	60	15,928	33	10,776	38	6,667	71	17,443
Germany	All other countries	5	1,645	40	4,853	45	6,498	4	1,000	24	3,063	28	4,063
	United States	2	637	2	637	2	637						
	Germany	30	7,602	24	4,059	54	11,661	30	8,434	27	4,720	57	13,154
France	All other countries	1	336	24	3,913	25	4,249	31	4,882	31	4,882	31	4,882
	France	9	1,255	9	1,255	9	1,255						
Holland	All other countries	3	564	3	564	3	564						
	Holland	10	1,384	11	1,920	11	1,920	8	1,170	8	1,170	8	1,170
Russia	Russia	1	960	1	960	1	960						
	All other countries	5	2,335	5	2,335	5	2,335	5	2,299	5	2,299	5	2,299
United States	United States	1	314	1	314	1	314						
British North America	United States	1	246	1	246	1	246						
Spain	Spain	1	246	1	246	1	246						
Italy	Italy	2	543	2	543	2	543						
	United States	1,287	444,920	709	118,720	1,996	563,640	1,277	428,539	535	105,042	1,812	533,561

**DENMARK.**

*Report, by Consul Ryder, of Copenhagen, on the agriculture, trade, and industries of Denmark for the year 1879.*

**IMPORTS AND EXPORTS.**

I have the honor to transmit herewith my annual report for 1879, also statements of exports.

According to the official statistics, which are herewith respectfully transmitted, the imports and exports of this kingdom amounted in all to 343,000,000 crowns, of which 190,000,000 were imports and 153,000,000 exports.

The commerce of this country with Germany and England amounted to 67 per cent. on the quantity and 65 per cent. on the value of all importations, and is about equally divided between the two countries.

The amount of direct imports from the United States of America for the past four years—from 1874 to 1878—shows an increase of 264.31 per cent., as per annexed statement.

The carrying trade between Denmark and the United States during the past four years shows an increase of 215.38 per cent., as per annexed tabular statement. It is to be very much regretted, however, that this trade is entirely in foreign hands.

**DANISH MERCHANT MARINE.**

The entire merchant marine sailing under the Danish flag amounts to 3,286 ships, with 257,419 register tons. The merchant marine of the kingdom consists of 3,160 ships, 251,208½ register tons burden; of which 2,758 are sailing vessels, 168,290 register tons burden, and 84 steamers, with 10,127 register tons burden.

**AGRICULTURE.**

Of the whole area of the country, namely, 6,939,203 acres of land 2,165,694 acres were applied to the cultivations of grain, edible root, and planting purposes, and 2,741,925 acres for grazing, hay, harvest, fallow, meadow, common pasture, and gardening purposes. The area, applied to the cultivation of wood is estimated at 319,102 acres of land, and the sea areal covers 80,486 acres of land.

**REPORT ON THE HARVEST.**

The designations are of three degrees for the harvest, namely, over an average is denoted as 1.5, an average = 1, and under an average = 0.5. The closer the numbers, therefore, approach to 1.5, by so much the better has the harvest fallen out; the nearer it reaches to 0.5, by so much the worse has it been. The harvest proves itself to have been considerably less than that of last year; which, however, was an unusually good one. It seems to have been best in the islands, namely, in the most southerly and most fertile districts; while in Jutland, and especially in the northern districts, it has suffered most from the cold and wet weather.

*Wheat*, which only covers about 5 per cent. of the sowed areal, is best in those districts where it is grown to the greatest extent; ten of these districts give over an average, two an average, and six (Jutland) under an

average. It is best in Maribo district (1.30) where it plays the chief part, as here three times as much wheat is grown in proportion to rye; next comes Praesto (1.27) and then Silo district (1.25), where both descriptions of grain are about equally cultivated; Bornholm, 1.25; Holbæk, 1.21; Ribe, 1.17; Adense, 1.15; Soenborg, 1.14; Copenhagen, 1.10; and Frederiksborg, 1.06. The remaining districts (Jutland) have either an average crop or under.

*Rye* is grown on an areal of about four times as large as wheat, and is, therefore, on the whole of greater importance to the country. A considerable part of the rye, as will be known, was plowed up in the spring, having suffered so much from the heavy snowfall during the winter, and although the standing part improved very considerably during the month of June, rye on the whole has yielded less than an average crop. For a great part the quality is of an inferior description, the grains partly not having been duly developed and partly from rye being the cereal which suffered most during the unfavorable period of harvest time. Five districts alone have yielded over an average, three reach to an average, while ten districts show under an average harvest. At the head of the list stands Libe district, 1.10; next comes Ringkøbing 1; Holbæk, 1.06; Copenhagen and Praesto, 1.04; Silo, Odense, and Thisted, 1; while all the other districts are below an average. Lowest in the scale stands Aalborg, 0.70; then Hjørring, 0.64; and Aaehns, 0.58.

*Barley*, which takes the greatest share in the grain exports from this country, occupies about 25 per cent. of the sowed areal. On the whole, barley this year will surely reach an average, and it has suffered so much both from the cold and wet summer, as also from the unfavorable weather during harvest time, that it cannot be regarded in a favorable light as malting barley. It is therefore to be foreseen that the export of barley will relatively give a smaller money result to the country, and especially much less than that of last year; seven of the districts give over three each to an average, while eight are below. Many of the districts wherein the barley crops are of the chief importance stand very low on the list. At the head of the list is Bornholm, 1.40; Thisted, 1.29; Prests, 1.17; Aalborg, 1.13; Hjørring, 1.09; Maribo, 1.07; and Holbæk, 1.06. Worst of all has it been in the Copenhagen district (0.77).

*Oats* belong to the cereal most grown in this country, occupying almost 31 per cent. of the sown areal, and especially plays a principal part in Jutland. Fortunately this article has succeeded remarkably well in all parts of Denmark. All the districts have over an average crop; from the district of Thisted even all accounts mention as being above an average, and out of the 168 returns only 5 are given as being below an average. Most favorably have the crops turned out in Thisted, Odense, Sois, Maribo, Bornholm, and Aaendborg districts, all of which have yielded 1.40 to 1.50; the lowest has been in Copenhagen (1.15) and Frederiksborg (1.11) districts.

*Pease, tares, &c.*—These can scarcely be reckoned as occupying more than about 150,000 acres of land, of which a part is cut for green fodder. Although the accounts give a close approach to an average, it may nevertheless be taken for granted that they will in fact yield somewhat below an average, for the reason that pease which have given a smaller product than beans, with tares take up the largest areal. Eight districts show an average crop or over; ten below. At the top came the four Jutland districts, Wiborg (1.50), Aaehus (1.33), Yoing (1.25), and Aalborg (1.20); last on the list three other Jutland districts, Ribe (0.75), Ringkøbing, and Thisted (0.50).



*Roots* give, according to all accounts, a less favorable result, which can mainly be accounted for, owing to the potato crop, which comes under this heading, having throughout afforded a very sparing product. Potatoes also play a much larger part in Denmark than the other roots, occupying about four times as much areal as these. From all reports of districts given above, five have reached an average and six stand as under an average crop. Highest came Srio, 1.30; Praests, 1.22, and Holbaeck, 1.19; last on the list came Thisted, 0.75; Bornholm, 0.70, and Ringkjobing districts, 0.67.

*Hay*.—This crop has been very large, and especially as regards clover, which also was, on the whole, better than the meadow hay. As a rule, however, the hay crop cannot be equaled to that of last year, owing to the less favorable manner in which it has been housed. Alone Frederikborg district has not reached an average; Bornholm has had an average, and all the other districts above. This harvest seems to have been best in the island of Fymen, where the Sundborg district has 1.48 and Odense 1.45; next came Ribe, 1.43; Ramdere, 1.39; Praests and Thisted districts, 1.36.

The grain crops have filled very well, so that one can everywhere discover a large quantity of straw, but owing to the wet harvesting time the quality of the straw, as well at its fodder value, will be much diminished.

All circumstances being taken into due consideration, the harvest of 1879 may be reckoned as a good average one, and when the unfavorable state of the weather in the spring and the greatest part of the summer is taken into consideration, it may be looked upon as being very satisfactory. There is especially every reason for rejoicing that the agriculture in Denmark has been carried so well over the cold and damp summer, when one looks at other countries, especially Great Britain, whose agriculture has received such fearful injury in every direction from the unfavorable weather during the year 1879.

#### BUSINESS REVIVAL.

From the commercial movements of the past months it would appear as though a renewed life had again commenced to manifest itself in the so long stagnant condition in all branches of trade, and that speculation had again begun to show itself, although yet with some caution and within narrow limits. The heavy fall in prices has, on the whole, recovered itself somewhat, and in some branches the rise has even been to considerable extent; also from the banks and leading markets reports are received of an increasing demand for money, and the higher rates of discount bear full testimony thereto.

It is natural that these symptoms of renewed life, after the long stagnation, should be viewed with satisfaction and hope by the many who have suffered under the existing state and low prices, and with anxiety have seen their stocks reduced to much lower values than they represented, but on the other hand, it is of much importance that one should not entertain greater expectations than can reasonably be looked for, and especially that speculation, when it waked up from its long dream, should not take too great an impetus. There are already signs that operators in different branches have been somewhat too eager, and have, in consequence, already met with a reaction. Whenever prices of various articles have shown a tendency to rise too rapidly, they have soon again received a check before they obtained a solid basis of higher rates than those of previous averages.

Under these circumstances it is surely necessary to devote to this state of affairs a careful research and betimes try to come to a clear view how this long existing crisis might be considered as definitely at an end; and if with safety one can calculate upon the present revival maintaining itself, and that a new period of sound business life had commenced, with a lively but limited speculation, or if there are grounds for belief that the revival and rise in prices are only of a temporary nature or at any rate limited, and these limits of somewhat narrow dimensions, it is of special interest for me to examine into the previous existing conditions of things, to see if they strengthen or weaken the views entertained of the causes of the bad times which were adduced in my despatch No. 92.

Over-speculation in different commodities, swindling in stocks, and a disproportionate locking up of capital in partly imprudent or unremunerative works were the chief causes of the crisis that set in in 1873 and continued in the later years; but that its duration beyond a period when the effects from these causes had, in great measure, disappeared, and all grounds for belief that a new and sound revival might seem to have returned could only have had its foundation in the disproportion which various momentous causes, such, namely, as the German mint reform, as well as in the hoarding up of large quantities of gold by the banks of France, America, and other countries, together with a diminished supply in the production of gold, had produced between the amount of money circulation with the largely increased quantities in the latter years of the goods markets, which disproportions found a natural manifestation in the constant decline of prices, making all speculation impossible while weighing heavily on all business life, and thus preventing affairs from returning to a normal stage of increasing development.

As these views may probably, with some business men, have found an expression in the thesis which seems clearly to define these stated points, and easily fix itself on the mind, "it is the demand for gold which may be considered as the main cause of this continued stagnation in trade and low prices," it will not be unreasonable to ask, "Has a larger quantity of gold now come to hand since prices began to rise and a speculative desire seems to show itself; and can it be maintained reasonably that even if the gold productions during the past year may have received new life, but which can scarcely be established as yet, will it, under all circumstances, in view of the enormous masses of gold that are in the market, be of small importance towards reducing the value of that commodity to any considerable extent?" and one may probably, in the rising prices, and the life which undoubtedly, in many branches, has shown itself, find a decided proof that there is and always has been a sufficiency of gold, if only confidence and the political equilibrium of Europe commence to be restored once more.

Here it must be permitted, in all generality, to bring to remembrance that the mention made before in no way went out upon the thesis—taken absolutely—that too great a diminution in the gold masses had accrued, but, on the contrary, as before mentioned, that too great a disproportion had arisen between the circulating money medium and the larger offers of goods, owing to the great increase of production in the latter years. This inequality, which has not thus arisen solely from a diminished currency, but equally from overproduction and overspeculation, might consequently again cease to exist, not solely by an increase of the circulating medium—for example, by a similar fabrication of paper money like that which took place in France in 1871-'73—but equally so by a restric-

tion in the sale of goods—a restriction which will be the result of a misjudged and erroneous overproduction in many directions. Such is now made evident in last year's bad harvest in every direction in Europe, which has, in no small degree, tended to cause a rise in prices; but, at the same time, several other causes have made themselves to be felt, which deserve to be taken into closer consideration, in order that it may be made manifest if the rise in prices can be looked upon as permanent, and if speculation, contrary to expectation, will be carried further on.

First of all must be remembered the influence which the German customs tariff has exercised. When the new customs tariff suddenly levies duties on important classes of commodities, which hitherto have been duty free, and increases considerably the already existing duty on other articles, the consequences will naturally be, that until the date when they take effect, an unusually large importation of such goods will take place, and where it is a large country, like Germany, which makes the change, will the unusual large demand exercise a sensible influence on the goods market, and cause the price to rise considerably. As, for instance, I am informed that in Sweden, during the later period, heavy shipments of timber have been made from some of its ports, where large stocks had been lying almost unsalable—a like effect, although in a less degree, have the iron duties, which immediately came into force, had in the time while they were under discussion; and while other agencies, as will be shown further on, may have exercised their influence, still it may be taken for granted that this extraordinary importation of iron into Germany and the United States of America, has tended to the considerable rise in prices which has lately taken place in regard to this article, but which, as far as the United States are concerned, consisted mostly of imports in old scrap-iron, &c., from this port.

It is quite evident that the rise in prices and larger demand consequent thereon, which have been manifested in some of the most important commodities, have only been of a temporary nature, and now that the timber duties have come into force, have already ceased, but that in the near future, for these reasons, there will be a much smaller demand for these articles, on the part of Germany, than has previously been the case, and the same will naturally hold good with regard to the other classes of goods, of which a similar unusually importation has taken place.

As regards the rise which has taken place in the prices of several important branches of goods this may be found in the notoriously bad harvest which, during the past year, has occurred on this side of the Atlantic both in grain as well as wine and sugar. From this the possibility of a partial advance in prices can be attributed, a diminished production; and here also it thus holds good that so far the rise can only be regarded as transitory, inasmuch as another good harvest will remedy the present diminished production; while this is fully evident with regard to wine and sugar, the supplies on the other hand of grain will not on the whole be to any great extent less than that of the past year, because the production in our country seems to be fully capable of covering the demand in Europe; but such transactions will naturally have an influential effect in a broader circle. First it is evident that the carriage of such an enormous amount of grain from the United States to Europe must create a sudden life in shipping and advance the rates of freight similarly to the unusual increase of imports. Alone to England it is calculated that a supply of about 18,000,000 quarters will be required, of which by far the greatest part will be imported from the United States. Such an amount will be sufficient to fill an entire fleet of

vessels ; at any rate the whole Danish commercial navy would scarcely suffice for a tenth part of it. So total a failure of harvest as in England can thus create a certain life in shipping and commercial relations ; but while it is scarcely a life for which there is any special reason to rejoice over, so can it also be a question if one may look upon this movement as proof of new flourishing life in trade and shipping.

But also in other respects and directions will the effects of this large importation be made manifest. These 18,000,000 quarters it is calculated will cost England about £50,000,000 sterling. A great part thereof will doubtless be paid for in goods, but this extra export of goods from England will simply take the place of the demand which, in case of a good harvest, would have been made by the English land-owning interest. Our farmers will now get the goods which otherwise the English agriculturists would have taken in payment for their grain. But a considerable part of the amount will have to be paid in cash and this is shown already by the considerable gold exports to the United States. This gold will be taken from the large bank reserves, which represented the considerable savings of former years, but as it is not probable that it will be laid up in the banks of our country in a similar manner, at all events not in its entirety, there is all probability that the circulating medium will at least be increased by a part of the hitherto hoarded gold masses. By this an extra chance of a rise in prices is created ; on the one hand a diminished production and on the other a larger money circulating medium than in previous years.

The question now arises, to what extent this probability may be brought to a certainty, and what permanency it may attain. For the latter part, as regards the market of commodities and the supply thereof, this will in a great degree depend upon the result of this year's harvest in several directions ; so will it first chiefly depend upon the mode of employment given in our country to the large amounts of gold pouring in ; and there are apparently signs that America, which, during the last six years may be considered to have finally remedied, by successive savings, that over-consumption of capital which produced a crisis in 1873, and to have closed the vacancies created by that state of things, now sees herself in a position to give the new capital successively flowing in a productive and useful employment, which will again bring into circulation the stocks of gold hitherto hoarded up in England and France. And this productive employment has already commenced in the direction which, under present circumstances, it might be expected to take. There is, in the circumstances hitherto touched upon, namely, in the deficient harvests, no ground whatever to expect an increased demand of manufactures, which could cause the price of these to rise to any great extent ; and the same views which have hitherto kept speculators back from entering upon construction of new fabrics, or from extending the existing ones, may be considered as still existing. Under such circumstances speculation will naturally be turned to such employment of capital as has a local monopoly, and which is more or less independent of the influences of competition, and which could not result from goods whose values are regulated by the world's market.

As an example for such employment the construction of railways specially presents itself. The pressure which the prospects of a probable decline in other commodities might exercise in the construction of factories, &c., will not equally hold good in the construction of railways, and it has also shown itself that in this direction the waking speculation in the United States, encouraged by the hitherto low prices of iron, has commenced to move. It is this which has principally tended to in-

flate the iron prices, and we have, perhaps, arrived at the same starting-point towards an upward movement, as in 1869. Will this movement now take the same dimensions as at that time? It is not likely nor desirable. Whenever a special demand is made, and therewith a general rise in value takes place in so large and widespread an industry as the iron trade, it must always be attended by widespread consequences. The larger profits which both the proprietors of iron-works and the workmen make put them in a position to cause a demand for other articles, which will also equally advance in price, giving thus to other branches of industry employment and profit, and this movement can thus be continued and spread itself broadly, supported by a widespread system of credit.

But if this forward movement does not at the same time meet with a corresponding dilation of the circulating money medium, it cannot lead to a general and permanent rise of other commodities. It was the amount created suddenly of more than 2,000,000 of francs in paper currency, which in 1871-'73 made this possible, and it was the successive withdrawal of the same in 1874-'76 which brought prices down to their former level; from whence the great demand for gold to carry out the currency reform as well as for the creation of large bank reserves drove it to a still lower point. Should, therefore no similar movements of the like nature step in, which cannot be foreseen at present, it need not be expected that the present rise, which has now manifested itself in business life, and which is now specially observable in the iron industries, will force prices on the whole to any great extent over the present rates. Any speculation, based on the expectation of a general advance in prices will, therefore, without doubt, lead to new disappointment. But neither is such called for in order that a new and solid business life should again be brought into existence after the long period of inaction. When the point is first reached where prices no further recede, but where on the contrary a cessation from the hitherto extra demand for gold makes it possible for the gold in some measure to keep pace with the steadily increasing goods supply, then may a sure and solid expansion be enabled to take place; and it is now only desirable to keep this on a steady course. With this view, the new life in the iron industries may give the required impetus, and it is to be hoped that this will be the case. But a condition for this must be that extravagant expectations do not lead to a too widespread speculation; but that a clear view of the situation will teach how to meet a renewed revival with reflection and calmness.

HENRY B. RYDER.

UNITED STATES CONSULATE,  
Copenhagen, January 10, 1880.

No. 1.—*Statement showing the amount of exports from this consulate to the United States of America for the year ending December 31, 1879.*

	Crowns.
First quarter.....	48,486 72
Second quarter.....	11,251 06
Third quarter.....	25,975 96
Fourth quarter.....	264,152 40

Total .....	349,866 14
-------------	------------

At 26.80 cents per crown .....	\$93,764 11
--------------------------------	-------------

No. 3.—*Statement showing the imports and exports of Denmark with the United States of America from 1875 to 1878, inclusive.*

[Copied from official statistics.]

Years.	Imports.	Exports*.	Total.
	<i>Crowns.</i>	<i>Crowns.</i>	<i>Crowns.</i>
1875 .....	2, 107, 012	132, 993	2, 240, 005
1876 .....	3, 883, 764	15, 141	3, 868, 905
1877 .....	8, 085, 472	16, 017	8, 071, 489
1878 .....	8, 143, 313	17, 293	8, 160, 606

Average, 264.31 per cent. increase.

\* The above exports are not correct. According to the books of this consulate the exports amounted from 1875 to 1878, inclusive, viz:

	<i>Crowns.</i>
1875 .....	87, 165 75
1876 .....	91, 780 38
1877 .....	90, 990 72
1878 .....	57, 014 28

The importations from the United States consist mostly of Indian corn, petroleum, hardware, glass-ware, clover-seed, and all articles and manufactures which can be imported cheaper and to more advantage from the United States than France, England, Germany, &c.—R.

No. 4.—*Statement showing the number of steamers, and sailing vessels, and their tonnage, inward and outward bound, between Denmark and the United States of America from 1875 to 1878, inclusive.*

[Copied from official statistics.]

Years.	Num-ber.	Register tons.	Register tons.
1875 .....	39	15, 001	8, 219
1876 .....	41	16, 913	12, 558
1877 .....	126	48, 742	37, 995
1878 .....	123	53, 105	39, 105

Increase in number of ships, 215.38 per cent.; increase in tonnage, 375.79 per cent.

## GERMANY.

*Report, by Consul-General Kreismann, of Berlin, on the commerce and industries of Germany for the years 1878 and 1879.*

I have the honor to transmit herewith the annual report required by paragraph 381 of the Consular Regulations. The returns given comprehend the entire German Empire, or where no figures or statistics for the same could be obtained, the Kingdom of Prussia.

I have endeavored as far as possible to follow the order and periods prescribed in the paragraph of the Regulations aforesaid. An exception had to be made, however, in the case of the statistics relative to tobacco, which could not be procured to a later date than June 30, 1878.

Of the general condition of the trade and industry of Germany it must still be said that the state of prostration which has prevailed of late years has in the main extended to this year also; but a decided change for the better seems now to be taking place. There has certainly been a very remarkable rise in the value of stocks and securities of all kinds. The reviving prosperity is particularly noticeable in the coal and iron industry and trade, also in the increasing freight business of

the railroads. The rise in the value of railroad stocks has recently been very great and rapid, occasioned no doubt, to a considerable degree, by the action of the Prussian Government in purchasing many of the leading lines of road, hitherto owned by private stock companies, with a view of establishing an exclusive system of state railroads, as one of the measures of national economy which Prince Bismarck seeks to introduce throughout the Empire.

#### AGRICULTURE.

The total extent of arable land within the limits of the German Empire is estimated 76,912,626 acres, and in the year 1878 54,238,974 acres were under actual cultivation. The wood land consists of 34,240,668 acres; the meadow of 10,749,831 acres; the vineyards of 330,744 acres.

The principal crops harvested in the German Empire were, in 1878, as follows, viz :

	Cwt.
Wheat.....	52, 142, 441
Rye.....	138, 390, 125
Spelt.....	8, 939, 109
Barley.....	46, 503, 824
Oats.....	100, 800, 429
Buckwheat.....	4, 497, 545
Pease.....	10, 243, 538
Beans.....	4, 587, 806
Potatoes.....	471, 853, 241
Beets and turnips.....	238, 235, 042

From statistics made by agricultural societies, under directions given by the ministry of agriculture, the crop of Prussia for 1879 would seem to be about an average one. These statistics are at the rate of so many kilograms per hectare, and, as compared with the yield in 1878, show as follows, viz :

Articles.	1879.	1878.
	Kilos.	Kilos.
Wheat.....per hectare..	1, 524	1, 533
Spelt.....do.....	1, 123	1, 240
Rye.....do.....	1, 178	1, 149
Barley.....do.....	1, 421	1, 523
Oats.....do.....	1, 398	1, 377
Buckwheat.....do.....	868	930
Pease.....do.....	1, 228	1, 115
Beans.....do.....	1, 495	1, 486
Potatoes.....do.....	8, 570	9, 124
Sugar-beets.....do.....	24, 491	25, 708
Flax.....do.....	868	1, 075
Hops.....do.....	476	521

The average prices of the chief agricultural products, given in marks per 100 kilograms, have, for the past five years, been as follows, viz :

Harvest.	Wheat.	Rye.	Barley.	Oats.	Potatoes.	Straw.	Hay.
	Marks.	Marks.	Marks.	Marks.	Marks.	Marks.	Marks.
1874-75.....	19. 8	17	17. 4	18. 6	5. 80	4. 70	9. 30
1875-76.....	20. 5	16. 9	16. 9	17. 8	5. 55	6. 30	8. 80
1876-77.....	22. 6	18. 5	16. 8	16. 9	6. 25	7. 20	8. 05
1877-78.....	21. 8	15. 4	16. 6	14. 6	5. 85	4. 45	5. 75
1878-79.....	18. 5	13. 4	14. 3	13. 1	5. 75	3. 70	5. 05

Owing to the partial failure of the crops, especially of grain, in Europe generally this year, prices of late have considerably increased—the

price of rye, the staple article of food, which cost in June last 119 marks per ton of 2,000 pounds, now sells at 148 marks, and wheat, which then brought 184 marks per ton, now brings 229 marks.

But for the plentiful supplies which our own country can and does fortunately furnish, the rise would be much greater still and lead to serious want and distress, as may be the case even as it is, among the laboring and poorer classes of the population of this and all other countries in Europe. The United States have indeed become the blessed store-house of the nations.

*Beet sugar.*—The cultivation of sugar-beets steadily continues to grow in importance, and the manufacture of beet sugar has fairly become one of the leading and most profitable industries in this country. Only forty years ago no more than 20,000 acres were planted with beets, while at the present time nearly 400,000 acres of land are devoted to that purpose per annum. For fuller particulars I beg to refer to the following table:

*Return of beet-sugar production in the German Zollverein.*

Years.	Number of sugar factories in operation.	Quantity of beets manufactured in to sugar.	Total quantity of raw sugar produced.
		<i>Cwt.</i>	<i>Cwt.</i>
1860-'61.....	247	29,354,032	2,530,520
1861-'62.....	247	31,692,394	2,515,269
1862-'63.....	247	36,719,259	2,760,847
1863-'64.....	253	39,911,520	3,023,600
1864-'65.....	270	41,641,204	3,413,214
1865-'66.....	295	43,452,773	3,713,912
1866-'67.....	296	50,712,709	4,024,818
1867-'68.....	296	40,593,392	3,300,276
1868-'69.....	295	49,953,056	4,162,805
1869-'70.....	296	51,697,733	4,307,645
1870-'71.....	304	61,012,012	5,250,734
1871-'72.....	311	45,018,368	3,728,838
1872-'73.....	324	63,631,015	5,251,021
1873-'74.....	327	70,575,277	5,820,813
1874-'75.....	333	55,134,902	5,128,247
1875-'76.....	332	83,225,083	7,180,984
1876-'77.....	328	71,000,731	5,788,453
1877-'78.....	329	81,819,360	7,560,181

As a matter of commercial interest it may also be stated that, of the total quantity of raw sugar refined by the 64 sugar refineries existing in this country, 4,420,954 cwt. were beet sugar, while the remainder, cane sugar, amounted to only 3,699 cwt.

*Starch sugar.*—It is proper to advert also to the manufacture of starch sugar.

Within the fiscal year of the German Empire, ending the 31st of March last, 47 starch-sugar manufactories were in operation, by which 405,230 cwt. of starch of their own manufacture and 594,824 cwt. of starch acquired otherwise, were manufactured into sugar, resulting in the production of 234,156 cwt. in loaves of sugar, 323,620 cwt. in sirups and molasses, 18,250 cwt. in so-called sugar coloring, which is used as an ingredient of beer, rum, &c. The average price of starch sugar is \$3.75 per cwt.; of starch-sugar sirups, \$3.50 per cwt.; and of sugar coloring, about \$4.25 per cwt.

The statistics of the production, importation, and exportation of and of excise taxes and customs-duties on tobacco for the year ending June 30, 1878—the latest available date, as has been before stated—are contained in the table herewith given:



Table showing the production, importation, and exportation of tobacco, and the taxes and customs duties collected on tobacco within the German Zollverein during the year ending June 30, 1878.

States of the German Empire.	Production of raw tobacco.				Importation of tobacco.				Exportation of tobacco.				Remaining for home consumption.		Taxes and customs duties on tobacco.										
	Raw tobacco.		Cigars.		Snuff.		The total amount re-duced to raw tobacco.		Total quantity of tobacco pro-duced and imported.		Raw tobacco.		Tobacco in rolls, &c.		Cigars.		Snuff.		Total quantity of tobacco exported reduced to raw tobacco.		Taxes on tobacco.	Customs duty.	Total of taxes and du-ties.	Drawbacks.	Net revenue.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.					
Prussia.....	179,402	962,351	2,477	11,598	45	17,710	20,232	13,383	1,160	17,710	20,232	13,383	1,160	17,710	20,232	13,383	1,160	17,710	20,232	13,383	1,160	17,710	20,232	13,383	1,160
Bavaria.....	111,767	110,685	7,742	818	106	11,582	495	1,361	166	11,582	495	1,361	166	11,582	495	1,361	166	11,582	495	1,361	166	11,582	495	1,361	166
Saxony.....	35	132,779	213	716	50	646	368	68	165	646	368	68	165	646	368	68	165	646	368	68	165	646	368	68	165
Württemberg.....	3,018	40,904	131	860	83	16,788	4,256	807	3,379	16,788	4,256	807	3,379	16,788	4,256	807	3,379	16,788	4,256	807	3,379	16,788	4,256	807	3,379
Baden.....	181,330	92,914	210	258	2	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1
Hesse.....	15,225	83,927	44	135	1	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1
Mecklenburg.....	4,119	4,614	120	48	67	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1
Thuringia.....	5,114	17,370	42	91	67	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1	2	34	49	1
Oldenburg.....	755	26,221	41	54	6	28,839	2,614	1,141	238	28,839	2,614	1,141	238	28,839	2,614	1,141	238	28,839	2,614	1,141	238	28,839	2,614	1,141	238
Brunswick.....	2,541	4,032	11	6	6	1,496	159	139	1	1,496	159	139	1	1,496	159	139	1	1,496	159	139	1	1,496	159	139	1
Anhalt.....	93,896	14,019	1,057	682	179	28,839	2,614	1,141	238	28,839	2,614	1,141	238	28,839	2,614	1,141	238	28,839	2,614	1,141	238	28,839	2,614	1,141	238
Alsace-Lorraine.....	2,908	68	37	1	1	1,496	159	139	1	1,496	159	139	1	1,496	159	139	1	1,496	159	139	1	1,496	159	139	1
Luxemburg.....	597,262	1,531,968	12,161	14,870	467	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109
Total 1877-78.....	634,033	993,546	11,941	13,562	461	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109
Total 1876-77.....	634,033	993,546	11,941	13,562	461	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109
Hence in 1877-78—	-36,771	-538,422	+220	+1,308	+6	-55,488	-7,555	-6,766	+924	-55,488	-7,555	-6,766	+924	-55,488	-7,555	-6,766	+924	-55,488	-7,555	-6,766	+924	-55,488	-7,555	-6,766	+924
Increase (+).....																									
Decrease (-).....																									
1876-77.....	634,033	993,546	11,941	13,562	461	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109	1,063	37,158	17,966	5,109
1875-76.....	750,313	925,728	10,207	15,805	417	1,987,446	1,716,769	198,647	42,663	1,987,446	1,716,769	198,647	42,663	1,987,446	1,716,769	198,647	42,663	1,987,446	1,716,769	198,647	42,663	1,987,446	1,716,769	198,647	42,663
1874-75.....	842,653	858,679	10,779	15,164	268	890,003	1,732,656	198,733	52,169	890,003	1,732,656	198,733	52,169	890,003	1,732,656	198,733	52,169	890,003	1,732,656	198,733	52,169	890,003	1,732,656	198,733	52,169
1873-74.....	1,081,397	688,532	9,881	14,464	251	717,997	1,799,394	142,843	49,837	717,997	1,799,394	142,843	49,837	717,997	1,799,394	142,843	49,837	717,997	1,799,394	142,843	49,837	717,997	1,799,394	142,843	49,837
1872-73.....	902,644	1,534,089	10,724	14,907	219	1,565,008	2,467,652	199,196	31,182	1,565,008	2,467,652	199,196	31,182	1,565,008	2,467,652	199,196	31,182	1,565,008	2,467,652	199,196	31,182	1,565,008	2,467,652	199,196	31,182
1871-72.....	717,907	977,643	8,738	12,912	262	1,003,972	1,721,879	79,467	27,681	1,003,972	1,721,879	79,467	27,681	1,003,972	1,721,879	79,467	27,681	1,003,972	1,721,879	79,467	27,681	1,003,972	1,721,879	79,467	27,681

The price of raw, unmanufactured domestic tobacco during the period embraced in said table has averaged \$5.75 per cwt.

## MANUFACTURES.

Of the manufactures of Germany it may be said that no perceptible recovery has as yet occurred from the depression that for years has pervaded all branches of the same. Great hopes for improvement are based on the new tariff, a full English translation of which has been heretofore furnished to the Department.

Whether or not these hopes will be fully realized remains still to be seen. A brief allusion may not be out of place here to the movement now organizing for holding an international exhibition in Berlin in 1886. The impetus for the same was given by the decided success of the industrial exhibition held in this year in this city, and of which a brief report was made to the Department in my No. 435.

There is reason to believe that the Emperor, and more particularly the Crown Prince, are in favor of the plan, but Prince Bismarck is reported as averse to it, his preference being for an earlier exhibition to be held here confined to the German and Austro-Hungarian Empires.

## MINES AND MINING.

Proceeding still in the order of the Regulations, I beg to refer for a condensed general statement of the condition of the mines of this country to the following table made up for the years 1877 and 1878:

*Comparative table showing the volume and value of the production of German mines, salt works, furnaces, and foundries during the calendar years 1877 and 1878.*

Products.	Volume in—		Value in—		Percentages of value in 1878. Increase, +; decrease, —.
	1878.	1877.	1878.	1877.	
I.—Production of mines.					
1. Mineral coal and bitumen:	<i>Cwt.</i>	<i>Cwt.</i>	<i>Marks.</i>	<i>Marks.</i>	
Anthracite (true coal) .....	788,586, 167	748,475, 491	49,412, 115	51,484, 435	— 4.0
Lignite (brown coal) .....	219,422, 340	212,888, 534	8,522, 162	8,504, 089	+ 0.2
Asphaltum .....	946,580	794,704	181,886	164,801	+ 10.4
Naptha .....	16,900	17,293	17,295	20,039	— 13.7
2. Mineral salts:					
Rock salt .....	4,058,790	3,415,725	321,969	272,510	+ 18.1
Niters .....	15,404,266	16,234,327	1,534,663	1,535,657	— 0.1
Bitter salts .....	10,396	3,040	1,237	342	+261.5
3. Ores:					
Iron ores .....	108,738,150	98,689,363	6,368,442	5,549,382	+ 14.8
Zinc ores .....	11,943,864	11,530,952	2,433,611	2,639,923	— 7.8
Lead ores .....	3,011,390	2,932,014	4,577,289	5,391,848	— 9.5
Copper ores .....	7,470,132	686,900	2,038,694	1,838,894	+ 10.9
Silver and gold ores .....	357,871	375,927	717,842	949,397	— 24.4
Antimony ores .....	3,798	3,249	9,914	11,556	— 14.2
Arsenic ores .....	25,235	22,674	11,756	7,528	+ 56.1
Manganese ores .....	119,002	128,137	63,485	77,895	— 18.5
Wolframium ores .....	571	367	922	591	+ 55.9
Common iron pyrites .....	2,007,306	2,122,520	306,435	374,966	— 18.9
Other vitriol and alum ores .....	695,102	892,114	24,479	32,224	— 24.0
II.—Salts obtained from aqueous solutions.					
Table salt (chloride of sodium) .....	8,099,997	8,271,834	2,596,557	2,644,829	— 1.8
Chloride of potassium .....	2,116,735	1,747,556	2,676,930	2,378,682	+ 12.5
Chloride of magnesium .....	170,861	118,300	56,763	47,815	+ 18.7

Comparative table showing the volume and value of the production of German mines, &c.—Continued.

Products.	Volume in—		Value in—		Percentages of value in 1878. Increase, +; decrease, —.
	1878.	1877.	1878.	1877.	
II.—Salts obtained from aqueous solutions—Continued.					
	<i>Owt.</i>	<i>Owt.</i>	<i>Marks.</i>	<i>Marks.</i>	
Sulphates of alkalis .....	569,515	559,965	348,133	356,952	— 3.0
Sulphates of magnesia .....	229,032	364,410	18,980	22,057	— 14.4
Sulphates of earths (alum) .....	74,624	79,020	141,244	167,367	—107.4
III.—Productions of furnaces and foundries.					
A. Pigs, &c.:					
Iron .....	42,488,874	38,131,583	26,714,707	25,720,534	+ 3.9
Zinc .....	1,899,070	1,807,236	7,536,828	7,907,828	— 5.8
Lead (also litharge for sale) .....	1,687,441	1,605,754	6,462,623	7,421,763	— 12.9
Copper .....	180,811	167,236	3,160,061	3,026,772	+ 4.4
Regulus of copper for sale .....	5,731	4,966	27,124	24,990	+ 11.7
Silver .....	(lbs.) 383,821	(lbs.) 293,070	6,016,525	5,626,782	+ 6.9
Gold .....	(lbs.) 617	(lbs.) 445	205,277	147,964	+ 38.7
Blue color products .....	6,786	7,192	346,539	374,512	- 7.5
Cadmium .....	(lbs.) 4,980	(lbs.) 4,043	6,673	5,759	+ 15.9
Tin .....	1,662	1,762	25,601	31,470	- 18.4
Antimony .....	2,490	1,860	13,664	11,678	+ 17.0
Arsenics .....	24,501	16,853	80,894	71,028	+ 13.0
Sulphur (pure) .....	17,721	31,398	34,678	64,940	- 46.6
Sulphuric acid (English) .....	1,776,744	1,668,967	1,251,187	1,496,974	- 16.4
Vitriols:					
Green .....	54,186	51,121	36,659	35,069	+ 4.5
Blue .....	87,706	68,098	369,916	339,312	+ 12.3
Mixed .....	418	698	924	1,640	- 43.5
White .....	6,585	8,672	9,470	12,900	- 26.6
Earthy colors .....	4,779	6,672	8,138	15,229	- 46.6
B. Species of pig iron:					
Pigs for casting .....	2,104,279	2,860,169	1,456,866	1,754,956	- 17.0
Pigs for ingot iron .....	8,842,064	7,729,877	7,168,175	6,550,554	+ 9.4
Pigs for weld iron .....	30,904,208	27,282,417	17,196,903	16,139,515	+ 6.5
Cast ware of first smelting .....	455,644	508,148	771,284	1,111,187	- 30.6
Scrap and wash iron .....	182,679	251,572	124,479	164,323	- 24.3
IV.—Pig iron manufactured.					
A. Cast ware of second smelting .....	7,674,889	7,741,961	16,612,639	18,086,906	- 8.2
B. Weld iron (wrought iron and steel) ..	21,839,226	19,867,762	37,695,262	36,063,843	+ 4.5
C. Ingot iron (including crucible cast steel) .....	7,063,459	5,915,593	13,414,714	12,599,609	+ 6.5

## SALT STATISTICS.

The interest and importance of the subject seeming to warrant the proceeding, a special table of salt statistics has been prepared in a table, which is as follows, viz :

Statement showing the production of all kinds of salt and the amount of tax collected thereon within the limits of the German Zollverein during the fiscal year ending March 31, 1879.

State or county.	Kinds of salt.	Amount of salt produced.	Amount of tax collected thereon.
Kingdom of Prussia	Crystal salt	<i>Owt.</i> 1,148,703	\$26,093
	Rock salt	718,023	11,304
	Salt procured by evaporation	4,372,943	2,547,663
	Salt-lick stone for cattle	15,998	
	Panscale	56,487	15
	Other salt remanent	48,565	
	Brine	99	67
	Mother lie	9	2
Total		6,360,827	2,585,144

*Statement showing the production of all kinds of salt, &c.—Continued.*

State or county.	Kinds of salt.	Amount of salt produced.	Amount of tax collected thereon.
Kingdom of Bavaria .....		<i>Unst.</i>	
	Rock salt .....	11, 817	236
	Salt procured by evaporation .....	879, 414	718, 720
	Panscale .....	5, 982	
	Brine .....	6, 178	
	Salt remanent .....	8, 665	
<b>Total</b> .....		906, 456	718, 956
Kingdom of Württemberg .....	Crystal salt .....	207	296
	Rock salt .....	1, 236, 659	247
	Salt procured by evaporation .....	560, 995	333, 000
	Salt remanent .....	4, 864	
<b>Total</b> .....		1, 802, 715	863, 543
Grand Duchy of Baden .....	Salt procured by evaporation .....	646, 173	290, 291
	Panscale .....	207	
	Salt remanent .....	5, 341	
	Brine .....	1, 626	
<b>Total</b> .....		553, 347	290, 291
Grand Duchy of Hesse .....	Salt procured by evaporation .....	288, 865	158, 389
Grand Duchy of Mecklenburg .....	Salt procured by evaporation .....	33, 198	35, 879
Thuringian States .....	Rock salt .....	391, 159	
	Salt procured by evaporation .....	621, 686	483, 361
	Salt-lick stone for cattle .....	1, 250	
	Panscale .....	1, 157	
	Other salt remanent .....	26, 005	
	<b>Total</b> .....	1, 041, 251	483, 361
Duchy of Brunswick .....	Salt procured by evaporation .....	114, 848	130, 608
	Panscale .....	2, 607	
<b>Total</b> .....		117, 455	130, 608
Duchy of Anhalt .....	Crystal salt .....	1, 690	577
	Rock salt .....	248, 928	156
<b>Total</b> .....		250, 618	733
Alsace-Lorraine .....	Salt procured by evaporation .....	787, 415	107, 180
<b>Total of the German Zollverein</b> .....	RECAPITULATION.		
	Crystal salt .....	1, 150, 600	28, 966
	Rock salt .....	2, 606, 586	11, 942
	Salt procured by evaporation .....	8, 205, 531	4, 814, 093
	Salt-lick stone for cattle .....	23, 230	
	Panscale .....	66, 630	15
	Other salt remanent .....	87, 830	
	Brine .....	1, 725	67
	Mother lie .....	9	1
<b>Total</b> .....		12, 142, 147	4, 853, 084

#### THE GERMAN FISHERIES.

No statistical returns of any value are extant in regard to the fisheries, but it may be stated that the number of persons engaged in sea-fishing is reliably estimated at 17,135 individuals, the fishing craft of all kinds used by the same numbering 8,130.

Recognizing the importance of fish as an article of human food, the "German Fisheries Association," a body of prominent and influential men, is rendering the country signal service by fostering and extending the artificial breeding of suitable varieties for properly stocking the rivers and inland waters. It is in contemplation by that association to hold in the ensuing year an "international fishery exhibition" at Berlin—an enterprise which is receiving much encouragement in Great Britain

and other countries of Europe, and which, it is hoped, will receive the support and co-operation also of the United States. I shall not fail to keep the Department properly advised of the undertaking.

### WOODS AND FORESTS.

Returns relating to the products of the forests as the succeeding topic to be noticed, with the permission of the Department, will be deferred until a full report on forestry subjects, which is now in process of preparation by order and under direction of the Federal Council, shall become available.

### GERMAN MERCHANT MARINE.

Returns of the German merchant marine, extending to the 1st of January last, are herewith submitted :

*Comparative table showing the number, tonnage, &c., of German ships existing on January 1, 1871-1879.*

[Baltic and German Ocean coasts.]

Years.	Sailing vessels.			Steamers.				Total.		
	Number of ships.	Registered tons net.	Number of crew.	Number of ships.	Registered tons net.	Horse-power of steam-engines.	Number of crew.	Number of ships.	Registered tons net.	Number of crew.
January 1, 1871.....	4, 372	900, 361	34, 739	147	81, 994	23, 287	4, 736	4, 519	982, 355	39, 475
1872.....	4, 354	891, 660	34, 273	175	97, 030	27, 164	5, 636	4, 529	988, 690	39, 909
1873.....	4, 311	869, 637	33, 618	216	129, 521	33, 325	6, 621	4, 627	999, 158	40, 239
1874.....	4, 242	866, 092	33, 103	253	167, 633	41, 755	8, 293	4, 495	1, 033, 725	41, 896
1875.....	4, 303	878, 385	33, 085	299	189, 998	48, 422	9, 339	4, 602	1, 068, 383	42, 424
1876.....	4, 426	901, 313	33, 215	319	183, 569	50, 756	9, 147	4, 745	1, 084, 882	42, 862
1877.....	4, 491	922, 704	33, 255	318	180, 946	49, 875	8, 589	4, 809	1, 103, 650	41, 844
1878.....	4, 469	934, 556	32, 659	336	183, 379	50, 603	8, 173	4, 805	1, 117, 935	40, 852
1879.....	4, 453	949, 467	32, 362	351	179, 662	52, 313	7, 616	4, 804	1, 129, 129	39, 978
Diminutions for 1878.....	263	52, 595	.....	25	18, 853	4, 972	.....	288	71, 448	.....
Augmentations for 1878.....	247	67, 506	.....	40	15, 136	6, 682	.....	287	82, 642	.....
January, 1879, decrease.....	16	.....	.....	.....	3, 717	.....	.....	1	.....	.....
January, 1879, increase.....	.....	14, 911	.....	15	.....	1, 710	.....	.....	11, 194	.....

Among the number of ships existing on January 1, 1879, there were 98 sailing vessels and 336 steamers of iron, and 4,355 sailing-vessels and 15 steamers of wood.

### IMPORTS AND EXPORTS.

Imports include all articles, whether entered for consumption in the country or entered for transit to other countries, and likewise exports include all articles in transit through the German Zollverein, as well as the articles exported of German product. The total value of articles imported, as estimated by the Imperial Statistical Bureau, was in 1878 \$1,138,023,180, and in 1877 \$1,177,271,760, of which \$889,851,060, in 1878 and \$922,745,040 in 1877 are estimated as the value of imports for home consumption.

The total amount of customs duties collected was in 1878 \$26,537,343,

and in 1877 \$25,441,628. The comparatively largest sums of duties in both these years were derived from the following articles, viz :

Articles.	1878.	1877.
Coffee, raw.....	\$472, 972	\$456, 087
Tobacco, unmanufactured.....	308, 026	214, 808
Rice, peeled.....	284, 905	271, 524
Wine and must, in barrels.....	237, 977	247, 365
Salt.....	179, 699	180, 109
Linseed-oil, in barrels.....	173, 469	151, 961
Meat, prepared, ham, pork, &c.....	150, 472	89, 571
Herrings.....	171, 857	158, 681

*Statement of the commerce in Germany for the year ending December 31, 1878, as shown by the returns of the Zollverein.*

Articles.	IMPORTS.			EXPORTS.
	Quantity.	Value.		Quantity.
	1878.	1878.	1877.	1878.
Cereals and mill-ground grain.....cwt..	68, 100, 000	\$149, 940, 000	\$174, 454, 000	44, 900, 000
Fermented liquors.....do.....	2, 140, 000	20, 825, 000	23, 919, 000	3, 330, 000
Sugar, coffee, spices, confectionery, &c.do..	6, 492, 000	96, 866, 000	104, 244, 000	7, 480, 000
Tobacco and manufactures of tobacco.do..	2, 382, 000	42, 840, 000	33, 082, 000	990, 000
Seeds, fruit, plants.....do.....	8, 150, 000	34, 629, 000	33, 058, 200	4, 820, 000
Animals and animal food.....cwt..	3, 719, 000	108, 551, 800	107, 100, 000	3, 040, 000
Do.....pieces.....	2, 627, 000			2, 675, 000
Do.....tons.....	1, 033, 000			245, 000
Manure and waste materials.....cwt..	6, 980, 000	12, 971, 000	13, 423, 200	4, 150, 000
Fuel.....do.....	101, 014, 000	14, 184, 800	15, 374, 800	128, 196, 000
Earths, ores, stones, rough and hewn.do..	23, 080, 000	18, 373, 600	19, 873, 000	39, 410, 000
Manufactures of stone, clay, and glass.do..	3, 050, 000	6, 140, 400	7, 473, 200	12, 000, 000
Metals.....do.....	10, 467, 000	16, 564, 800	18, 135, 600	10, 897, 000
Metals, coarsely worked and prepared.do..	2, 146, 000	5, 447, 820	6, 771, 100	8, 450, 000
Manufactures of metals.....do.....	1, 064, 000	7, 116, 200	8, 330, 000	2, 880, 000
Drugs, chemicals, and dye-stuffs.....do..	9, 550, 000	43, 889, 600	57, 667, 400	6, 780, 000
Resin, gums, fats, ether, and soaps.....do..	11, 330, 000	48, 337, 800	56, 215, 600	4, 020, 000
Felt, materials, hair, feathers, hides.....do..	2, 433, 000	50, 218, 000	46, 838, 400	1, 606, 000
Manufactures of leather, fur, and felt.....do..	51, 000	9, 210, 800	9, 972, 200	82, 000
Spinning materials.....do.....	7, 490, 000	152, 320, 000	163, 030, 000	3, 180, 000
Yarns.....do.....	1, 718, 000	58, 786, 000	57, 358, 000	1, 189, 000
Yarnmaker's articles, textile fabrics, &c., cwt.....	1, 249, 000	93, 772, 000	101, 150, 000	1, 823, 000
Manufactures of India-rubber fabrics.do..	45, 000	2, 660, 840	2, 748, 900	63, 000
Paper, pasteboards, and manufactures, &c.....	292, 000	2, 451, 400	2, 856, 000	882, 000
Timber, lumber, wood for building, manufactures of cork, whalebone, ivory, and similar materials.....cwt..	32, 746, 000	48, 694, 800	49, 837, 200	22, 690, 000
Do.....pieces.....	3, 383, 000			16, 000
Woodenware, carved, and basket ware, cwt.....	807, 000			1, 340, 000
Machines, vehicles, instruments, &c., cwt.....	1, 106, 000	7, 380, 380	6, 859, 160	1, 770, 000
Do.....pieces.....	4, 000	17, 445, 400	16, 636, 200	5, 000
Fancy goods and objects of art.....cwt..	96, 000	7, 337, 540	6, 545, 000	390, 000
Manuscripts, printed matter, &c.....do..	65, 000	2, 927, 400	2, 641, 800	99, 000
Coins and precious metals.....do.....	12, 000	56, 882, 000	29, 821, 400	9, 000
Miscellaneous.....do.....	92, 000	1, 309, 000	1, 856, 400	309, 000
Total.....cwt.....	307, 846, 000	1, 138, 023, 180	1, 177, 271, 760	316, 775, 000
Total.....pieces.....	6, 014, 000			2, 696, 600
Total.....tons.....	1, 033, 000			245, 000

#### THE TRADE OF GERMANY WITH THE UNITED STATES.

The increase of \$3,186,596.02 in the value of declared exports to the United States for the year ending September 30, 1879, as compared with the preceding year, affords a happy sign of re-established prosperity at home.

Imports from the United States to Germany, at present, chiefly con-

sist of grain and produce. But for the new German tariff a favorable market could have been found for many American manufactures also. So far as the rates of duties established by that tariff on grain, lard, bacon, and petroleum are concerned, an agitation has already commenced for their suspension; and in view of the fact that the price of labor and the earnings of the people here have not increased, when the costs of necessities of life have greatly advanced, seems to justify the demand made of the government in the premises, all the more so for the reason that a more severe winter than has been known here for many years has already set in, causing fuel of all kinds, particularly coal, to enhance in price.

As an interesting item, it deserves to be noted that, during the past year, a demand has developed for paper of American manufacture, and that article promises to find a fair market here, for the reason that the same is found to be of greater purity, freer from spots and defects, and possesses a more perfect finish than the paper made in any other country. These merits are correctly attributed to the selection by American paper manufacturers of the best and most suitable materials for their productions and to the superior kind of machinery employed in American paper-mills.

#### REVENUES AND EXPENDITURES.

*Statement showing the revenues and expenditures of the German Empire for the fiscal year from April 1, 1879, to March 31, 1880.*

##### A.—REVENUES.

No.	Description of revenues.	Amount.
1	Customs duties and internal revenues .....	\$59,904,210
2	Stamp-tax on play-cards .....	289,468
3	Stamp-tax on bills of exchange .....	1,566,397
4	Surplus receipts of post-office and telegraph departments ....	3,718,264
5	Amount of earnings from railways of the Empire .....	2,358,560
6	Surplus receipts of government's printing office .....	42,840
7	From the Imperial Bank .....	358,199
8	Sundries .....	1,724,060
9	From the invalid fund of the Empire .....	7,481,162
10	Surplus of preceding years .....	249,906
11	Mints and coinage .....	23,800
12	Interest from invested funds of the Empire .....	1,310,424
13	From deficiency appropriations .....	27,569,615
14	Total amount of the quota paid by the several States of the Empire .....	24,120,206
	Total revenue .....	130,706,633

##### B.—EXPENDITURES.

Regularly accruing expenses.	Amount.	Extraordinary expenditures.	Amount.
Chancellor of the Empire .....	\$24,700	Office of the chancellor of the Empire .....	\$144,824
Office of the chancellor of the Empire .....	512,841	Imperial Diet .....	7,140
Federal council .....	76,636	Foreign office .....	165,410
Imperial Diet .....	1,507,950	Post office and telegraph departments .....	2,428,357
Foreign office .....	77,130,995	War department .....	10,900,748
War department, including the Bavarian army .....	6,370,713	Navy department .....	5,138,422
Navy department .....	277,994	Judiciary of the Empire .....	78,826
Judiciary of the Empire .....	752,036	Treasury department of the Empire .....	544,841
Treasury department .....	62,059	Department of the railways of the Empire .....	42,840
Department of the railways of the Empire .....	40,878	Auditing and controlling tribunal .....	2,380
Imperial chancery for Alsace-Lorraine .....	2,161,635	Administration of railways .....	3,857,105
National debt of the Empire—interest .....	109,670	Mints and coinage .....	5,402,600
Auditing and controlling tribunal .....	4,232,767	Expenditures in consequence of the war against France .....	1,251,135
General pension fund—army, navy, and civil administration .....	7,481,131	Total extraordinary expenditures .....	29,964,628
Invalid fund of the Empire .....		Total regularly occurring expenditures .....	106,742,005
Total .....	100,742,005	Grand total of expenditures .....	130,706,633
		Grand total of revenues .....	130,706,633

## THE GERMAN RAILWAYS.

Such statistics of German railways as have been compiled for the purpose of this report are contained in the following table:

*Table showing the revenues arising from customs and taxes collected in common in the German Empire for the period from April 1 to September 30, 1879.*

[Increase +; decrease —.]

Description of revenues.	Estimates of receipts during the above period.	Drawbacks.	Remainder.	Receipts for the same period of preceding year.	Increase and decrease.
Customs.....	\$17, 974, 457	\$7, 269	\$17, 967, 188	\$11, 728, 613	+ \$6, 238, 575
Beet-sugar tax.....	24, 401	3, 029, 977	3, 006, 576	2, 362, 623	+ 642, 953
Salt tax.....	3, 747, 797	1, 875	3, 746, 121	3, 748, 208	— 2, 087
Tobacco tax.....	79, 894	12, 476	67, 419	54, 568	+ 12, 851
Whisky tax.....	3, 451, 556	743, 860	2, 707, 687	2, 602, 073	+ 105, 613
Transit duty on whisky.....	11, 495	—	11, 495	11, 883	— 388
Brewing tax.....	1, 811, 632	19, 519	1, 792, 113	1, 802, 784	— 10, 672
Transit duty on beer.....	106, 574	—	106, 574	101, 027	+ 5, 547
<b>Total.....</b>	<b>27, 208, 006</b>	<b>3, 814, 986</b>	<b>23, 393, 020</b>	<b>17, 686, 534</b>	<b>+ 5, 706, 486</b>
Stamp tax on play-cards.....	94, 977	—	94, 977	—	+ 94, 977
Stamp tax on bills of exchange.....	—	—	757, 502	729, 686	+ 27, 804
Post and telegraph administration.....	—	—	14, 716, 627	14, 471, 350	+ 245, 277
Railway administration.....	—	—	4, 446, 602	4, 525, 262	— 78, 660

*Status of the German (exclusive of Bavarian) railways on September 30, 1879.*

Description of railways.	Length of track.	Earnings.	
		Total in American gold.	Per kilometer.
<b>I.—State railways as compared with the year 1878.....</b>	<b>Kilometers.</b>		
Increase.....	12, 597 36	\$55, 262, 625	\$4, 559 00
Decrease.....	1, 186 20	628, 328	388 00
<b>II.—Railways owned by private companies but managed by government.....</b>	<b>4, 092 59</b>	<b>22, 570, 848</b>	<b>542 00</b>
As compared with the year 1878:			
Increase.....	83 87	—	—
Decrease.....	—	6, 562	—
<b>III.—Railways owned and managed by private companies.....</b>	<b>11, 520 64</b>	<b>50, 327, 255</b>	<b>445 60</b>
As compared with the year 1878:			
Increase.....	402 72	—	—
Decrease.....	—	889, 298	760 00
<b>Grand total for 1879 (+ I + II + III).....</b>	<b>28, 210 59</b>	<b>128, 160, 728</b>	<b>466 02</b>
As compared with 1878:			
Increase.....	1, 672 79	—	—
Decrease.....	—	1, 525, 189	250 13



## COINAGE.

Table showing the total of the imperial money coined in the German mints up the 18th of October, 1879.

Description.	Marks.*	Dollars.
<b>GOLD COINS.</b>		
Double crowns.....	1,267,478,660.00	301,659,921 00
Crowns.....	420,956,780.00	100,187,714 00
Half crowns.....	27,969,145.00	6,656,657 00
Total.....	1,716,404,585.00	408,504,291 00
<b>SILVER COINS.</b>		
Five-mark pieces.....	71,652,415.00	17,053,275 00
Two-mark pieces.....	98,509,686.00	23,445,305 00
One-mark pieces.....	149,742,857.00	35,638,800 00
Fifty-pence pieces.....	71,486,388.00	17,013,760 00
Twenty-pence pieces.....	35,717,718.20	8,500,817 00
Total.....	427,103,064.20	101,651,957 05
<b>NICKEL COINS.</b>		
Ten-pence pieces.....	23,502,530.70	5,593,602 00
Five-pence pieces.....	11,657,813.75	2,774,559 00
Total.....	35,160,344.45	8,368,161 00
<b>COPPER COINS.</b>		
Two-pence pieces.....	6,213,207.44	1,478,743 00
One-penny pieces.....	3,382,722.83	805,088 00
Total.....	9,595,930.27	2,283,831 00

\* The German mark is equal to 23.8 cents.

## OUTSTANDING TREASURY NOTES.

Statement of the amount of treasury notes outstanding of the states of the German Empire and the empire on September 30, 1879.

No.	Names of the states.	Amount of state treasury notes heretofore issued.	Amount of state treasury notes canceled or withdrawn.	Amount issued of treasury notes of the empire.	Amount of treasury notes of the empire authorized to be issued in lieu of all state treasury notes by the act of April 30, 1874.
1	Prussia (including Lauenberg).....	\$14,610,042	\$14,610,041	\$17,170,626	\$17,170,628
2	Bavaria.....	8,568,000	8,521,825	8,379,013	8,379,014
3	Saxony.....	8,568,000	8,495,008	1,780,201	1,780,201
4	Württemberg.....	2,447,999	2,421,888	1,266,454	1,266,454
5	Baden.....	2,652,000	2,627,987	1,017,850	1,017,851
6	Hesse.....	1,754,400	1,736,448	593,966	593,966
7	Mecklenburg-Schwerin.....	703,290	700,434	388,412	388,413
8	Grand Duchy Saxony.....	428,400	420,728	199,301	199,301
9	Mecklenburg-Strelitz.....	571,200	567,894	67,538	67,539
10	Oldenburg.....	.....	.....	217,787	217,788
11	Brunswick.....	714,000	707,117	217,323	217,323
12	Saxe-Meiningen.....	428,400	402,767	130,885	130,896
13	Saxe-Altenburg.....	346,718	338,847	98,975	98,975
14	Saxe-Coburg-Gotha.....	428,400	422,170	121,411	121,412
15	Anhalt.....	678,300	659,022	141,675	141,676
16	Schwarzburg-Sondershausen.....	107,100	106,406	46,792	46,792
17	Schwarzburg-Rudolstadt.....	142,800	136,919	52,594	52,595
18	Waldeck.....	149,940	146,604	39,155	39,156
19	Rensa, senior line.....	92,820	90,262	31,404	31,404
20	Rensa, junior line.....	228,480	220,434	62,003	62,003
21	Schaumburg-Lippe.....	242,760	241,946	22,326	22,326
22	Lippe.....	.....	.....	77,395	77,396
23	Lübeck.....	.....	.....	36,322	36,323
24	Bremen.....	.....	.....	85,242	85,242
25	Hamburg.....	.....	.....	236,065	236,066
26	Alsace-Lorraine.....	.....	.....	1,079,257	1,079,260
	Total.....	43,863,050	43,574,650	28,551,983	28,560,000

CONDITION OF THE GERMAN BANKS.  
*Report on the condition of the German banks of issue on August 31, 1879.*

Names of the banks.	Liabilities.			Assets.								
	Stock capital.	Reserve fund.	Notes in circulation.	Total liabilities.	Specie on hand.	Treasury notes on hand.	Notes of other banks on hand.	Bills of exchange.	Collaterals.	Stocks and bonds.	Other assets.	Total assets.
Imperial Bank.....	\$28,590,000	\$3,623,074	\$160,225	\$237,970,438	\$129,610,754	\$11,290,006	\$43,102	\$70,457,738	\$11,518,724	\$1,238,076	\$5,483,982	\$239,092,682
Municipal Bank of Breslau.....	714,000	142,800	543,116	2,200,072	234,430	2,932	80,984	1,110,032	696,388	104,006	6,664	2,242,438
Private Bank of Cologne.....	714,000	178,500	468,710	2,196,740	185,878	2,856	158,984	1,809,752	184,688		62,356	2,246,968
Private Bank of Magdeburg.....	714,000	144,228	697,114	1,809,038	227,052	2,618	158,984	1,191,904	245,378		12,852	1,888,788
Private Bank of Danzig.....	714,000	178,500	404,124	2,115,344	181,356		23,274	1,481,312	156,128	66,164	155,632	2,153,424
Province of Posen Bank.....	714,000	178,500	451,248	1,813,322	165,172		23,274	1,261,400	279,412		116,400	1,851,640
Bank of Hanover.....	2,858,000	205,158	807,058	5,262,422	409,122	1,904	23,274	2,576,588	151,844	76,160	2,011,576	5,252,422
Bank of Frankfurt.....	4,080,000	850,612	2,117,724	9,097,550	909,398	153,086	75,822	8,706,278	363,664	371,280	458,388	9,236,780
Bavarian Bank of Issue.....	1,785,000	69,496	15,636,492	18,402,874	8,141,742	4,522	357,000	8,706,278	363,664	371,280	458,388	18,402,874
Saxon Bank of Issue.....	7,140,000	789,446	8,861,432	18,941,094	4,156,432	16,184	591,006	9,801,602	1,104,706	1,348,746	1,191,428	18,904,692
Clearing House Bank, Leipzig.....	714,000	31,654	632,120	1,840,692	247,282	2,142	93,772	933,912	388,416		175,168	1,804,692
City Bank of Chemnitz.....	121,380	27,570	421,142	981,750	247,282	2,238	32,606	756,602	25,466	31,416	88,298	981,750
Württemberg Bank of Issue.....	2,142,000	69,208	4,829,734	7,267,106	2,400,468	3,570	84,728	4,382,056	105,196	94,390	159,698	7,282,106
Bank of Baden.....	2,142,000	328,918	2,207,450	4,874,954	2,400,468	5,712	64,498	4,374,602	277,746	7,378	371,042	4,874,954
Bank of South Germany.....	3,728,836	366,758	2,972,382	7,276,374	1,021,734	2,238	108,706	4,235,210	519,554	871,556	519,316	3,870,876
Bank of Brunswick.....	2,494,000	73,542	478,142	3,881,078	194,232	9,758	44,982	1,831,886	492,898		366,120	3,870,876
Bank of Commerce of Lübeck.....	571,200	10,324	171,860	1,624,588	59,976	1,984	57,834	798,252	47,362	258,468	430,304	1,654,100
Bank of Bremen.....	3,952,466	184,450	966,280	8,898,464	379,372	1,467	30,464	7,774,746	486,534	85,442	215,390	8,972,124
Total.....	63,863,016	7,460,536	202,619,396	335,472,900	149,285,500	11,497,066	5,394,270	133,766,234	18,118,226	5,683,440	13,316,388	337,061,076



## POPULATION AND EMIGRATION.

Respecting the population of Germany, it is proper to state that no new census has been taken since the year 1875. Then the same was found to consist of 42,727,360 inhabitants. Taking the present territory of the empire as the basis, the population in 1816, the first year of the establishment of the old German Confederation, with the seat of the Diet at Frankfort-on-the-Main, numbered 24,831,696; in 1834, the year in which the German Zollverein was first established, it had increased to 30,608,698; in 1852, when the Kingdom of Hanover and certain other States joined the Zollverein also, the population was 35,929,691; again, in 1867, in which year the first enumeration under the then North-German Confederation occurred, the population consisted of 40,180,125.

The population of no other country in Europe has grown at a like rate, and in the case of Germany it is all the more striking from the fact that the wars with Denmark in 1864, with Austria in 1866, and with France in 1870, have entailed heavy human losses, and the country has been otherwise continually drained of population by emigration.

In illustration of the latter fact the following figures, taken from official sources, may be cited, viz :

Years.	Total emigration.	To the United States.
1871.....	75,912	73,816
1872.....	125,650	120,056
1873.....	103,638	96,641
1874.....	45,112	42,492
1875.....	30,773	27,834
1876.....	28,368	22,767
1877.....	21,964	18,240
1878.....	24,217	20,373
Total.....	455,634	422,219

For next year an increased emigration to the United States may be looked for. The prosperity in our own country will not fail to exert its power of attraction to the thousands of this empire who will seek to escape from want and distress at home to a country with plenty in requiring labor, cheap and ample food.

## FOOD PRICES.

At present the prices of the principal breadstuffs and articles of food in this city are as follows, to wit:

Per 100 kilograms (220.46 pounds avoirdupois):

Wheat:	
Best quality.....	\$5 61
Middling quality.....	5 33
Inferior quality.....	4 76
Rye:	
Best quality.....	4 11
Middling quality.....	3 99
Inferior quality.....	3 80
Potatoes.....	\$1 75 to 1 19
Pease.....	7 61 to 4 76
Beans.....	9 04 to 5 23

Per 1 kilogram (2.2046 pounds avoirdupois) :

Beef, choice cuts.....	\$0 35 to 0 47
Beef, other parts.....	0 23 to 0 23
Pork.....	0 33 to 0 23
Veal.....	0 35 to 0 23
Mutton.....	0 30 to 0 23
Butter.....	0 47 to 0 38
Eggs, per dozen.....	0 18 to 0 16

H. KREISMANN.

UNITED STATES CONSULATE-GENERAL,  
Berlin, November 29, 1879.

## GERMANY.

*Report, by Consul-General Lee, of Frankfort-on-the-Main, on the agriculture, commerce, manufactures, finances, and co-operative societies of Germany, with statistics relating to labor and the principal industries of the country, for the year ending September 30, 1879.*

### AGRICULTURE.

The planting and growing season of the current year was one of extraordinary wetness. The temperature during a large part of the season was unusually low, being frequently from 12° to 18° Fahr. under the average. The cold and variable weather of winter extended far into the spring, and during March and April rain and cloud were seldom interrupted. May and June had 15 rainy days each, and July 21. The latter month had no single day entirely destitute of cloud, and only 7 that were tolerably clear. Twenty-seven per. cent. more rain than average fell at this station during the year 1878, yet the proportionate quantity was still greater during the first seven months of the present year. During the months of August and September the weather improved considerably, and was, fortunately, favorable to the maturity and gathering of crops. These phenomena, with the variations produced by latitude and topography, prevailed generally in Europe. Throughout the continent the last winter was the most severe and tedious, and the season of spring and early summer the tardiest and most unfavorable known for many years.

### CROPS.

In the aggregate, however, the result has not been disastrous to agriculture in this part of Germany. The grape crop, to be sure, is a notable exception to this statement. The report of the consular agent at Mayence, whose jurisdiction includes most of the grape-growing territory of this consular district, shows that during the last thirty years there have been but six good and five first-rate vintages in that section. It also states that this year's crop will probably be one of the three most inferior which have been known for a century. The usually extensive vintages of the Pfalz are, with few exceptions, a failure. In Würtemberg, Baden, and Northern Bavaria the crop is equally inferior and deficient, as appears by the reports of the consuls for those districts. The blooming, maturing, and ripening of the grapes have been alike retarded by the unpropitious weather.

Diligent inquiry has failed to discover an instance of the appearance of the phylloxera in the vineyards of this district during the past year.

Extreme precautions against the insect have been maintained, and the few occasions of its manifestation have been met by energetic and successful measures of extirpation.

The root and cereal crops have only exceptionally shared the calamities of the vine. This is sufficiently evident, although no precise or complete statistics of this year's harvest have yet been published, or will be until February next. In Prussia it has been the custom for some years past to collate estimates of what the crops will probably be, and compare the general results with an average yield. This year, for the first time, the comparison was made with last year's harvest, and taking that to be equivalent to 100, the yield in the five leading products this year was estimated as follows:

Localities.	Wheat.	Rye.	Barley.	Oats.	Potatoes.
East Prussia .....	108	114	97	93	116
West Prussia .....	103	118	98	96	136
Brandenburg .....	104	84	85	96	99
Pomerania .....	98	104	103	102	109
Posen .....	101	92	81	87	112
Silesia .....	102	104	90	109	95
Saxony .....	96	95	89	108	110
Schleswig-Holstein .....	99	97	114	108	75
Hanover .....	101	100	106	109	93
Westphalia .....	101	92	101	103	89
Hesse-Nassau .....	100	87	104	97	107
Rhineland .....	104	102	106	108	96
Hohenzollern .....	94	81	82	97	118
All Prussia .....	100	103	94	102	96

These estimates were based upon 695 reports in regard to wheat, 753 as to rye, 707 as to barley, 750 as to oats, and 691 as to potatoes. The reports were collated in July, when the prospects were much more unfavorable than they afterwards proved. Authentic information of later date, now in the possession of this office, shows that in this consular district the actual amount of wheat harvested was about 25 per cent. greater than last year's crop; of oats, 33 per cent. greater; of barley, about the same, and of rye about 10 per cent. less. In light, dry soil, potatoes produced about 25 per cent. more than last year, and in heavy soils, not affording quick evaporation of the excessive moisture, about 25 per cent. less.

#### CLIMATE.

This tolerably favorable result is due almost entirely to the atmospheric changes that took place after the month of July, and may justify some observations upon the climatic peculiarities of this region and the causes affecting them. The city of Frankfort, though in about the same latitude as Montreal, lies upon a very different isothermal line. Its winters and summers alike are mild and moist; snow falls later and disappears earlier than in the country north or south. Up to this date, for example, none has fallen here, although snow appeared at Dresden as early as the 14th, and at Nuremberg on the 16th of October, and the higher Bavarian Alps were covered at least two weeks before that. In the Black Forest, also, snow generally appears from one to two weeks earlier than here.

The weather of the Main valley is generally cloudy even in the absence of rain, and the soil being light and sandy, evaporation is rapid. It

seems fortunate, indeed, for a country of such moderate fertility and large population as a large part of Western Germany, that it is provided with an atmosphere so humid. The cloudy skies restrain evaporation, and the copious rains promote the decomposition of fertilizing substances. These observations are not so applicable, of course, to the rich valley of the Rhine as to the plateaux above it, yet for the whole country alike the excessive humidity is undoubtedly a wise provision of nature.

The forests of the country, which now flourish under the jealous protection of the government, and which, in this region, consist mostly of coniferous trees, are supposed to have considerable influence upon its climate. The forests form, it is said, a veritable apparatus for condensation, and have such influence upon the pluvial currents that more water falls upon them than upon the neighboring lands. This is especially true of the forests of pine, or fir, which produce, it is said, more than double the effect of the deciduous woods. Upon the latter an average of about 44 more millimeters of water falls during a period of four years than upon naked land, while the difference in favor of the pine forest is about 56 millimeters in three years.

The degree of saturation of the atmosphere is also constantly greater over the wooded districts than over the plains, the difference in this case, as in the other, being much the most strongly marked as to the coniferous forests. It is said, indeed, that if the vapors diffused in the air were always sufficiently condensed to be visible, the forests would be observed to be constantly surrounded by a vast humid screen, and the envelope of the resinous woods would appear much denser than that of the deciduous woods. These layers or banks of vapor are deemed of much benefit to the arable lands. They spread themselves upon the adjacent territory, and, being cooled by the night, are precipitated in the form of dew, which irrigates and refreshes the soil.

A considerable part of the water precipitated upon the forests is arrested by the trees and evaporated. The average of observations taken during four years shows that in a mass of deciduous timber the trees retain about 36 per cent. of the water which falls upon them. The average retained by the resinous timber during two years was  $53\frac{1}{2}$  per cent. At the same time the water which reaches the ground is not entirely absorbed thereby, but in part evaporated, this evaporation being much feebler under the timber than upon the open ground. Under the deciduous trees it is from three to four times feebler, while under the coniferous it is but two to three times. This is an additional proof that the coniferous trees have a much greater affinity for moisture than the deciduous.

The masses of timber have also a certain refrigerating power. It has been observed that, in consequence of the difference of temperature under the trees and above them, there exists an atmospheric current from below upward, and also a lateral current around the timber masses and thence to the plains. The ascending current carries upward the vapors from the ground, and, thereby fulfilling the office of a conductor, is believed to impart to the forests a certain efficiency in repelling hailstorms from their vicinity.

The ozonometric observations appear to indicate that under the forests, and chiefly under the resinous forests, there is less of ozone than in the uncovered territory, and that the atmosphere contains more of it at about 14 meters from the ground than it does at the surface.

Such appear to be the current opinions entertained with reference to the atmospheric influences of forests, and, if correct, they are of much

value in explaining the extreme humidity and other climatic peculiarities of a region like this, so largely clothed with resinous timber.

#### LABOR.

The labor market has not essentially changed during the past year. Advances in the rates of wages have been exceptional, probably, and have been more than outnumbered by the instances of decline. The following expressions by eight leading manufacturers and employers in as many different sections of the country may be taken as a fair index of the state of the market: 1. Wages same as last year, although prices of finished wares have greatly declined. 2. Wages had already been so much depressed during the previous year that a further reduction this year could not be thought of. 3. Wages and proportion of laborers employed same as last year; cost of living unchanged. 4. No essential increase or decrease of wages; same as to cost of living. 5. Wages have decreased about 12 per cent. during the last twelve months; cost of living unchanged; at least 15 per cent. less workmen now employed than a year ago. 6. Wages during the last twelve months about the same as before and no present inducement to raise them; cost of living approximately the same; number employed about the same as year before. 7. No change in wages for twelve months; increased living expenses may, however, make an advance necessary; owing to bad harvest the cost of living has advanced; about as many workmen employed as a year ago. 8. Wages have rather decreased than increased during the last twelve months; cost of living unchanged; fewer workmen employed than a year ago.

These statements are all recent, and apply to the twelve months next preceding the date of this report. They represent both the northern and southern sections of the empire, in which the conditions affecting the labor market are somewhat different. The weight of opinion as thus presented, and as corroborated from many other sources, is to the effect that the tendency has been to reduce rather than to advance wages, while at the same time there has been an increase rather than a decrease in the cost of living. On the whole, however, the changes have not been great either way, or in either respect, during the last twelve months. As to the future of wages everything depends upon the revival of prosperity and increased demand for production. Manufacturers have been saying that they cannot possibly pay more for labor, or for raw material, and withstand foreign competition. It remains as yet to be seen whether the protection afforded them by the new tariff will enable them to reward the laborer more liberally, and also whether the laborer, enduring the increased taxes which have been laid upon provisions, can afford to work for the same wages as before.

#### MANUFACTURES.

The condition of manufacturing industry during the year 1878-'79 is fairly presented in the summary of declared dividends and statements of production which is appended to this report. The list of establishments mentioned might be greatly increased, but those given represent most of the industrial districts, and also most of the important branches of industrial pursuit. The picture, though not destitute of shadow, is yet not so dark as might be inferred from the general and long continued outcry concerning commercial depression. In fact, it is quite possible for the general observer to be misled on that subject. It is true



that the average of profit has been moderate, that some great industries, as notably that of iron, have been greatly depressed, that some manufacturing establishments have been running at a loss, and that the majority have made very unsatisfactory gains. But when business depression exists at all, as it has existed in Germany during the last four or five years, there is a tendency to exaggerate it to a degree which puts out of sight the favorable and redeeming features of trade. There is also a disposition on the part of business men of most classes to disparage the amount of their profits, and as concerns the conduct and success of their affairs, to let the public know less than the truth.

Making due allowance for these things, it appears, according to the best information, that manufacturing production has in general declined rather than increased during the past year. At the same time there has been, in many branches, a reduction in the cost of producing as well as in the amount produced, so that the proportion of profit has not suffered so much as might be supposed. Manufacturers have learned, during the long depression, to counteract the influences against them and make the most of the unfavorable situation. It is also something in their favor that surplus stocks have been greatly reduced, if not cleared out, and that consumers have necessarily somewhat relaxed their severe and protracted economies, thereby increasing the home demand. There has also, of late, been a largely increased export of multitudes of small wares to the United States, and the effect of these influences, though comparatively slight, is already seen in the somewhat quickened activity of many branches of industry. This improvement has been very recent, and may be temporary, but, re-enforced by an unexpectedly fair harvest and the anticipated advantages of the new tariff, it has created a more hopeful feeling than has for a long time existed.

*Cotton spinning.*—Among the most depressed of the manufacturing industries has been that of cotton-spinning. This business had its principal growth between the years 1847 and 1865, during which time it enjoyed a duty on single-thread raw-twist, its principal product, of nine marks per centner. The number of spindles employed increased within this period from 750,298 to 2,235,195. Ten years later the number had advanced only to 2,700,862. A reaction against the business had set in, produced in part by greatly diminished demand, and by the precipitation of the entire product of Alsace-Lorraine upon the German market, duty free. Another powerful adverse influence was English competition. The decline in the export of English goods to the United States, owing to the increased and cheapened production of that country, was followed by a corresponding increase in their supply to the German market. Alike in the manufacturing districts of Alsace and of Northern, Southern, and Western Germany the English threads have been met as formidable rivals of the home product. The English producer, it is said, enjoys the advantages of cheaper raw material, coal, machines, and freights, larger capital, and better taught workmen. Complaint is also made against the continental railways as discriminating in favor of foreign freights to such an extent that English yarns are carried over a given space more cheaply than German.

Under these adverse influences the prices of yarn greatly declined, and at the end of 1878 reached the lowest point that had been known for twenty years. The German product was sold at cost, and exported, as a rule, below cost. The fluctuations in the prices of raw material were an additional disadvantage to the German manufacturer, since the prices of yarn followed those of cotton more promptly in England than in Germany, enabling the English manufacturer to avail himself of an

advance more quickly and successfully than his German rival. Stocks consequently accumulated in the German factories, some of which suspended, while others became insolvent, and most all reduced their working-time to 50 or 60 hours per week, and the wages of workmen 5 to 10 per cent.

Such was the state of the industry at the beginning of the present year. As to its condition now, and also that of others to which it is closely related, the following expressions are taken from letters of reliable manufacturers and dealers received at this office:

1. *Cotton industry*.—Has been bad the last year, and will probably become worse. Production in Southern and Western Germany has decreased.

2. *Cotton and weaving mills*.—Tolerably employed, but have little lucrative business.

3. *Bands, twists, and cord*.—Lifeless business. Most of factories without orders.

4. *Buttons and dress ornaments*.—Factories faring badly, and no prospect of improvement.

5. *Silk trimmings*.—A stagnation in production, which even the season cannot justify; sudden rise in prices of raw stuffs, especially raw silk.

6. *Velvets*.—Factories have an abundance to do.

7. *Silks*.—Factories tolerably employed, though demand is light. Production probably greater than last year, but the increase unprofitable.

8. *Linen cloth*.—Firm, regular business.

9. Manufacturers do not agree in their views of the prospect for next year. Some are despondent, others hopeful. In general, tolerable orders have come in, but it is difficult to forecast the market for goods so much influenced by fashion as those which the industry of this place supplies.

In the manufacture of carded yarn, much complaint is made of the competition of Belgium and the want of reciprocity in tariff provisions. Some of the spinneries have abandoned this part of their business.

The flax-spinning industry has complained of depression since 1875. Last year an extraordinary abatement in the production of flax yarn took place, and prices fell to a lower point than had been realized for a century. This decline was largely attributed to the cheap offers of Austrian spinners, against which even those of Belgium and England were obliged to recede. The Bohemian competition consumes the cheap, luxuriant *Rasenroest* flax, and enjoys the advantage of fifteen-hour workmen, re-enforced by children's labor. It gains, besides, in the currency exchanges. On the other hand, Russian flax, owing to the currency depreciation of that country, costs not more than two-thirds what it did two years ago—a fact in which the spinners naturally take more comfort than the growers of flax in Germany.

The business of linen weaving lost many advantages by its tardy adoption of the improved mechanical appliances. In earlier times Germany was pre-eminently a flax-spinning country. Women of all classes, high and low, learned to spin, and as a rule acquired remarkable skill in the art. This furnished the linen weavers with a material which no other country then produced in equal fineness and cheapness. Resting upon these advantages, the German industry was slow to adopt the mechanical spindle, which did not come into use here until twenty years after its adoption in England. At present hand-spinning is carried on to a comparatively small extent, but the advantages of machinery have not come until after having powerfully augmented the rivalry of other countries. This accounts much, no doubt, for the depression complained

of in the linen-weaving industry. During the civil war in the United States, that industry was prosperous, owing to the high prices of cotton, but this prosperity relaxed as soon as cotton came into the market again in large quantities. In 1878, as in 1877, the business was in much distress. The consumption of linen for laborers' shirtings, which had already declined, became still smaller. Great quantities of mechanically produced half-linen, or cotton chain with linen weft, were offered at ruinously low prices, and monopolized the market. These goods proved to be not very durable, and consequently substitutes for them have been offered in the form of linen chain with cotton weft. This material wears better than the other, but since it costs nearly as much as the all-linen goods, its future is not assured. In the midst of these rivalries the better sorts of linen have held their place in the market, and the substitution of cotton stuffs for bed linen has not materially progressed. At the same time the manufacture of jacquard, damask, and blue linen has remained about the same as in 1877. Linen pantaloon drillings have not been in great demand, owing to the unusual coolness of the season.

The jute industry is yet young in Germany, having had its origin in 1862. There are now thirteen factories, with 20,000 spindles, in operation, producing about 250,000 centners per annum. The prices are low, on account of French and Belgian competition.

In the weaving of white goods the fact became apparent, about two years ago, that the supply was beyond the demand. Excessive offerings depressed prices, and large stocks accumulated in store. In the course of the year 1878 this influence became somewhat relaxed; and during the first part of the present year the surplus stock, if not exhausted, was at least of moderate amount. In the meantime, the consumption of beaver and thick duffle cloth had constantly declined. This was chiefly due to deteriorations of quality, and especially to the use of untenable colors. At present this article is produced only in small quantities, from bad material, on hand looms, for the poorer classes. The export of beaver cloth has remained for some time very weak, the cheaper English fabric colored by improved processes having displaced the German in foreign markets. On the other hand, fustian, or dimity, flannel shirtings, summer hose, satins with fine woof, and similar white woven articles have had a fair demand, and have made some reparation for the idle looms.

There has been much complaint as to depressed prices of colored stuffs, which have declined in proportion to the cost of raw material, especially of cotton yarn. Yet nearly all the establishments making these goods have been kept in full operation, and the surplus in store has been unimportant. The export, also, has increased rather than decreased, but it is feared that the new duties on cotton yarn will seriously interfere with the foreign trade in these articles. The German manufacturer has reached a point, it is said, where the slightest increase in the cost of production will make it impossible for him to maintain that trade.

Cotton and half-wool stuffs, especially the better coat and pantaloons materials, have sold only at depressed prices, while the demand for the lighter grades has strongly declined.

The white-goods weaveries have produced a considerable amount of white flannel shirtings, which were afterwards colored, and the factories of colored goods have produced large quantities of the same material in colors. The demand for these articles has steadily increased. The better qualities of half-woolen clothing stuffs have suffered further decline, while the demand for the cheaper grades has been lively. The latter are manufactured at lowest cost in Bavaria.

The foregoing observations apply to the textile industries to which

they refer down to a recent period. At present these industries are in a transition, or, perhaps, rather an experimental state; and the effect upon them of the new tariff measures, and of the apparent revival in other branches of production, will be a curious study.

#### IRON AND STEEL.

The production of iron in Germany is authentically estimated at 37 kilograms per head of the population. The same estimate places the production of England at 203, of Belgium at 90, and of France at 39 kilograms per head. The consumption in Germany, which amounted in 1873 to 72.3 kilograms per head, declined in 1877 to 39.9. The imports in 1878 are stated at 9,154,931 centners of raw iron, 902,731 centners of rails, 106,136 centners of white iron plate, and 106,136 centners of iron and steel plates. The price of a ton of trade iron at the Lorraine works in 1872 was 336 marks. In 1873 it declined to 272, in 1874 to 180, in 1875 to 152, in 1876 to 125, in 1877 to 115, in 1878 to 110, and in 1879 to 105 marks.

The year 1878 closed without material abatement of the depression which had so long lain upon the iron industry, and the present year began with large additional reductions in the working force of many establishments. At the same time reductions were made in furnace wages of 3.7 per cent., in rolling-mill wages 2.33 per cent., and in puddlers' wages of 4.4 per cent. A considerable proportion of the iron works had been carried on up to that time without profit, and without realizing interest on their fixed or working capital; a great number had been obliged to suspend all payment of interest or principal of capital stock; many had worked on additional contributions, or credit emissions, where they could get credit, and others had been obliged to succumb entirely to the "crisis." This state of things has materially changed, however, in the course of the present year, and especially within the last two months. As early as February last, an improvement was experienced in some of the favorably situated works and branches. The trade in boiler plates, for example, took an unexpected start ahead, owing to an increased demand for engine boilers, both at home and in foreign markets.

With this and other exceptions, production remained about the same until the 1st of September last, when a more general though moderate increase of demand set in. The amount of puddling iron held in store by twenty-two leading Westphalian and Nassau furnaces was reduced by sales during the month from 59,000 to 42,000 tons. Prices began to improve about the same time, and at present have advanced from 10 to 15 per cent. on raw iron, and on some other kinds about 20 per cent. No. 1 cast iron has advanced from 57 to 65 and 67 marks per ton, raw puddling iron from 48 to 54 marks, gray German Bessemer raw iron from 56 to 64 marks, and steel rails from 125 to 136 and 140 marks.

At present reports come from all the great iron-producing districts of increased activity. Sheet, bar, and cast iron are all in demand, and most of the works are supplied with orders, some as far ahead as February. Furnaces long silent have been put into blast, the building of new works is proposed, large stocks that remained on hand a few weeks ago have been cleared out, and further advances in prices are discussed. A hopeful feeling prevails that the end of the "crisis" has come, and the improved state of things is naturally attributed in large measure to the new tariff on iron, which took effect in June last. But another influence has been at work far more potent than this, and that is the great and sudden demand for iron from the United States. For several weeks

prior to the present date the shipments of old rails and scrap iron from Germany on American orders have been very great, and the demand for such materials has been greater than the supply. The country has been stripped of its stock of old rails, and difficulty has been found in securing sufficient transportation for the sudden export.

Reflecting men see that this extraordinary demand is temporary and that the stimulus which it has imparted to the market cannot endure. Already the warning has been uttered that the "cause of the improvement has come from the United States, and not from interior sources," and the admonition is given that it will not be wise to rush headlong into excessive production. The demand from abroad has already exhibited signs of weakening, and may be materially reduced next year, when so many new American furnaces shall come into blast. It is only fair to presume, however, that if no financial crisis supervenes the German iron industry may now recover some of the ground it has lost, and be conducted for the future with more profit than during recent years. The tariff will somewhat reduce competition, and the expected transfer of the railways to the government will, it is hoped, relieve the stagnation in railway iron. Great efforts are being made to apply new dephosphorizing processes to the domestic ores, so as to utilize them in the manufacture of Bessemer steel. It is claimed that in some instances these efforts have been successful, and predictions are made of great results.

But beside this hopeful view should be placed the following expressions taken from correspondence recently received at this office:

1. Some few sheet-iron works in this district have plenty to do, but these are exceptions. In general there is little activity and small demand.

2. *Small iron ware and cutlery.*—No increase of production, but rather decrease. Prices weakening. Business unprofitable.

3. *Cast and wrought iron.*—Prices low; business tolerable.

4. *Steel.*—The great Krupp works at Essen have sufficient employment, but at tolerably low prices. Same with the Bochum works.

5. *Engines and boilers.*—In Northwest Germany the business is entirely lifeless. Shops employed mostly in repairing and changing. Prices and profits low.

These unfavorable statements, though authentic, perhaps draw the picture too darkly, but they show that the recent improvement in the iron industry and trade is not yet universal.

#### COAL.

The coal product of the Dortmund district in 1878 was 381,341,089 centners, an increase of about 30,000,000 centners over 1877. The shipments by rail and water amounted to 329,967,676 centners, an increase of nearly ten per cent. over the previous year. The number of persons supported by the labor of the mines during 1878 and the two next preceding years was as follows:

	1876.	1877.	1878.
Workmen .....	82, 284	72, 941	73, 989
Members of families .....	133, 296	124, 696	129, 059
Total .....	215, 580	197, 637	203, 048

A report from the same district for the third quarter of the present year shows 194 works in operation during that period, against 204 in the corresponding quarter of the year before. The amount of coal shipped was 98,729,745 centners, an increase of 1,549,093 over the same quarter of 1878. On the other hand the market value of the shipment was less, notwithstanding the increase of amount. Last year's quarter it amounted to 21,166,310 marks, and this year's to 20,125,007. The number of workmen employed was 75,497, against 74,105 the year before.

This is probably a fair illustration of the state of the coal industry down to the 1st of October last. Since that time the demand has somewhat increased, but the low prices of a year ago have not been materially improved. Many mines have been worked at a loss, and various unsuccessful efforts have been made to effect a combination by which the production might be limited. The output this year will, it is estimated, be about 10 per cent. greater than last.

The reawakening of furnaces has created an increased demand for coke, the prices of which have slightly advanced.

#### SALT.

The production of rock salt in Germany has advanced from 3,106,325 centners in 1876 to 3,757,186 in 1878-'79. The production of salines in 1876 amounted to 8,311,081 centners, and in 1878-'79 to 8,205,531. The distribution of the consumption of salt the past year was as follows: Preparing and preserving fodder, 1,815,251 centners; manufacture of soda and glauber salt, 1,783,816; chemicals and dyes, 208,660; artificial manures, 59,227; soap and candle factories, 104,870; leather production, 103,381; metals, 64,254; glass and pottery, 50,616; various purposes, 31,256; total, 4,221,333.

The total exports of German salt the past year have amounted to 2,089,785 centners. Russia received the largest quantity, taking 775,258 centners, or about twice as much as in 1873. The Netherlands, Norway, and Austria were the next best customers.

#### BEET SUGAR.

The production of beet-root sugar has greatly increased in Germany, as in Austria, where it is reported to have doubled since 1875. An interesting statement of the history, progress, and present condition of this industry will be found in the report of the consul at Stuttgart.\*

#### THE NEW TARIFF.

In my dispatch No. 147, of August 2 last, some account was given of the general features of the new German tariff, and of its particular application to various countries and industries. From that dispatch I would beg to make here some citations, with such additions and changes as make them applicable to the present time.

The act, adopted in the Imperial Parliament by a vote of 217 ayes against 117 noes, is intended to supersede the Zollverein tariff of October 1, 1870, and that subsequently enacted on the 7th of July, 1873.

In anticipation of its enactment, duties have been collected since June 1 of the current year on raw and old iron; since July 6 on brandy, arrack, rum, vinegar, wine, cider, fruits, nuts, coffee (raw and roasted), and the substitutes therefor, except chicory; on tea and on petroleum

---

\* This report will be found in the supplement.

and other mineral oils raw and refined; and since July 8 on raw tobacco leaves and stems, tobacco juice, and manufactured tobacco in its various forms.

The necessary orders for the collection of these taxes were formally promulgated by the government on the 31st of May, and on the 6th and 7th of July last.

Since the date of its publication (July 15) the new tariff has been in force with reference to the following articles: Iron, and manufactures of iron; hops, instruments, machines, and vehicles; animal fat, stearine, palmine, and paraffine, and wax; fish-oil, and other animal oils; eggs, cattle, beer, butter (real and artificial), meat, game, poultry, fish (raw and prepared), meat extracts, groceries, oranges, and other tropical fruits; spices, herrings, honey, cacao, caviare, surrogates, cheese, confectioneries, and vegetables; oysters, and other shell-fish; prepared mustard, olives, dried fruit, nuts, starch, sago, rice, salt, sirup, sugar, and other articles kindred to the foregoing.

On the 1st of October the tariff took effect as to anise, coriander, and rape seeds, grain, and other agricultural products, wood for fuel and for building, wooden furniture, and various kinds of manufactures.

On the 1st of July, 1880, application of the duties will be made to hemp, flax, and other vegetable materials for weaving, excepting cotton; and on the 1st of January, 1880, the entire tariff, with the exception just named, will go into effect.

Generally speaking, the German Empire is now commercially, as it is politically, one country, whose customs and political boundaries are identical, but this identity is not without exception. The cities of Hamburg and Bremen, and the port of Geestemünde, are within the political frontier, but as to the customs line they are outside places, and continue to be, as they have been, free-trade ports. On the other hand, the Grand Duchy of Luxemburg, which politically does not belong to Germany, is within her customs line, as is also the small Austrian municipality of Jungholz, between Bavaria and the Tyrol.

The population of the territories within the customs line is given at 42,337,974, of which the Kingdom of Prussia has 25,634,132.

The Imperial Government exercises general jurisdiction, through its commissioners, over the entire customs system, but the collection of the duties and the administration of the customs laws are relegated, subject to imperial instructions, to each state within its own territory. The secretary of finance of each federal state constitutes generally the highest authority of that state in reference to customs matters. In the kingdom of Bavaria, however, the secretary of state is such authority, and in Prussia it is invested in customs directories, one for each province, located in the cities of Königsberg, Danzig, Posen, Stettin, Berlin, Breslau, Magdeburg, Altona, Hannover, Münster, Cassel, and Cologne.

The central administration of the customs is established in the various German states as follows: For Bavaria, at Munich; Saxony, at Dresden; Württemberg, at Stuttgart; Baden, at Karlsruhe; Hesse, at Darmstadt; Mecklenburg, at Schwerin; Thüringen, at Erfurt; Oldenburg, at Oldenburg; Brunswick, at Brunswick; Anhalt, at Magdeburg; and Alsace-Lorraine, at Strasburg.

The command of the armed and uniformed custom-house guards which line the frontier is intrusted to an imperial chief inspector of customs.

The chief customs offices are competent to the transaction of all business pertaining to the collection of the duties, without restriction as to amount or kind, except that the import of raw sugar and of playing-

cards is limited to offices to which those commodities are expressly designated.

Subordinate offices of the first class are limited in their transactions to goods the dutiable value of which does not exceed sixty marks per hundred kilograms, and upon which the aggregate duties to be collected do not exceed three hundred marks.

Subordinate offices of the second class are limited to goods upon which the dutiable rate is not over thirty marks per hundred kilograms, and the aggregate of duties seventy-five marks.

The duties are levied on the gross weight whenever the tariff act specifically so provides, and always when the rate of taxation does not exceed six marks per hundred kilos. In all other cases the duties are levied on the net weight.

The rates of tare to be computed have been fixed by the Bundesrath as follows: For coarse ironware imported in casks and boxes 10, in baskets 6, and bales 4 per cent.; for dressed meat, fresh and prepared poultry, dead game of all kinds, meat extract, and table bouillon, when these articles are imported in casks and chests, 15, when in baskets 9, and when in bales 6 per cent.; for swine and goose fat, palmine, paraffine, spermaceti, and wax, when imported in casks and chests, 13 per cent., and for wooden furniture in boxes 16, in bales 6 per cent.

In the case of liquids, the casks are not deducted from the dutiable weight, only exterior packing being so deducted.

Pending the adoption of the law, an amendment was offered providing that 50 per cent. additional to the usual duties might be levied on commodities imported from countries which tax German goods much higher than Germany taxes theirs. This amendment was supposed to be aimed especially at the United States. In lieu of it a clause was inserted in the act, by which the additional 50 per cent. may be levied on the goods of countries which discriminate against those of Germany.

A clause which will take effect April 1, 1880, provides that the amount of revenues yielded in any one year in excess of 130,000,000 marks shall be apportioned among the different States in proportion to their population.

Provision is made by the new law for acquiring better statistical information concerning the import and export trade of the empire. The present statistics on these subjects are not considered complete or reliable. The kinds and quantities of goods entering Germany have been well known, but a large proportion of such goods have entered merely for transit to Austria, Switzerland and other portions of the continent, and the records which have been kept have given no correct idea of the amounts, qualities, and values of the merchandise thus received in transit. The statisticians have, therefore, been unable to state with much exactness the real condition of the foreign trade of the empire. With a view to supplying this deficiency of information, the law provides that an explicit description must be given as to the quality, value, place of production, and place of destination of all goods exported from or imported into Germany, and that such descriptions shall be duly filed in the nearest statistical bureau. A tax of 5 pfennige per head on animals, and the same for each 500 kilograms of packed, or each 1,000 kilograms of unpacked goods, and 10 pfennige per 10,000 kilograms of coal, iron, and other heavy materials, is levied to cover the expenses of this statistical feature of the new customs system. Exempt from this tax are consignments of goods on the free list not exceeding 250 grams in weight and small packages forwarded by mail.

Under the operations of this feature of the law, doubtless more accu



rate statistics will be obtained than have been possible heretofore as to the volume of trade between Germany and the United States, a subject concerning which existing information is and has been largely conjectural.

Ostensibly, the new tariff is a protective measure, and its justification has mainly been placed on that ground. For example, it is officially argued in behalf of the duties which have been placed upon breadstuffs that the agricultural industry of the empire has arrived at such a languishing state that protective measures must be resorted to in order to save it from total prostration. The present depression of agriculture is attributed to the superior powers of production of other countries, and their unresisted competition with the German agriculturist. As an effect of the duties, the government confidently anticipates a gradual decrease in the imports, and a corresponding increase in the production of agricultural staples. The apprehension that the duties will increase the cost of living for the producer is met by the assurance that there will surely take place, at the same time, an equal advance in the rate of wages. Moreover, rye and buckwheat, the standard breadstuffs of the poor, are not taxed, and as for meat, the laborer, it is said, does not eat meat. We are to understand, therefore, that the duties on wheat and on beef are intended as taxes upon those who are able to pay them; in other words, that wheat, wheat flour, and beef are not considered necessities to the German laborer.

It is hardly worth while to stop to consider what the American laborer would think of this argument, however suggestive it may be of the difference in the conditions of labor in Germany and the United States. The argument is cited here only to show that the defense of the new tariff is made on protective grounds, and it is easy to see that the prevailing state of production happens to have been especially favorable to that line of argument. In point of fact, the new tariff is a revenue tariff, and its main purpose is revenue. But for the deficiencies in the public exchequer and the necessity of laying additional taxes to meet them, a protective tariff would scarcely be attempted or seriously thought of in Germany. But production is depressed, labor is unremunerative, and, fortunately for the government, its need of revenue occurs at a time when the German producer happens to be more sensitive than perhaps ever before to the pressure of foreign competition. Correctly or incorrectly, he attributes the depression and unprofitableness of his trade to that competition, and accordingly he is prepared to welcome any plausible measure of protection against it.

As yet the influence of the tariff upon trade and production has been slight, and considerable time must still elapse before its complete effect can be realized. Many of its most important provisions have but just come into operation, and others, as already stated, still remain in abeyance. Large stocks of iron, tobacco, cotton thread, and many other staples were imported in anticipation of its adoption, and being not yet entirely consumed they prevent the increased duties from materially affecting the prices of such commodities.

So far as the measure is protective, there are grounds for believing that it will apply much more seriously against the trade of Austria, France, Russia, and Great Britain than against that of the United States. Russia, for example, has heretofore laid considerable duties on German products, while Germany has received those of Russia either free or subject to trifling taxation. But the Russian producer lacks, in many respects, the facilities for production possessed by the American, and is

therefore less competent than the latter to bear a given increase of duties.

The competition of England in cotton goods has already been referred to, and sufficiently explains the motives and the application of the protective duties on those articles. The levies on woollen yarns and fabrics may be explained in like manner.

The rivalry of Austria, and especially Bohemia, as well as of England, in flax-spinning, has also been referred to, and indicates the directions to which the duties on the imported products of that industry will tend. The imports of linen twist, heretofore received in large quantities from Belgium, will doubtless also feel the effect of those duties.

In the manufacture of ropes and cordage formidable competition has hitherto come from France and Italy. For this, and the further reason that Austria has placed additional duties upon these articles, the German duties have been raised.

The duties on iron were quite heavy down to the year 1834, after which they underwent various successive reductions until January 1, 1877, when they entirely ceased. The depression of the iron industry began about the same time in Germany as in the United States and England, directly after the financial crisis of 1873. The demand for iron beyond the Atlantic having at that time almost entirely ceased, the vast surplus production of England was thrown upon the continental market. The American demand having now for the time being revived, the German industry, as well as that of England, has revived with it, as has been seen. The new duties on iron have as yet produced no perceptible effect. But for the exports on foreign orders things would remain very nearly as they were. Whether the duties will materially benefit the iron-producing industry in future can now only be conjectured.

#### SODA.

In 1875 there were in Germany, inclusive of Alsace-Lorraine, twenty-one soda factories, producing about 1,000,000 centners of soda, mostly calcined, per annum. One establishment, at Mannheim, delivered about 300,000 centners. Three others have lately ceased to operate. During the same year the import of foreign soda amounted to about 56 per cent. of the total domestic production. The imports came mainly from England, Belgium, and Holland; also, more than formerly from Austria and France.

Down to the year 1865 the tariff discriminated only between purified and unpurified soda. Both, with some special exceptions, paid an import duty of 3 marks per centner. In 1865 the tariff made the classification which is now in use, of raw, natural, artificial, crystallized, and calcined soda. The kind first named paid a duty of 75 pfennige per centner, the last 2 marks, and caustic 3.

At the last reconstruction of the tariff, in 1873, the duty on calcined soda was reduced to 75 pfennige per centner.

An increase of the duty on imported soda has been asked by the German manufacturers, on the ground that those of England possess an undue advantage in cheaper raw materials, and in the ability to produce in larger quantities. Three of the English factories, it is said, produce as much as those of all Germany. At the same time there is no place in this country where coal and chalk are found so near together as in England.

Another reason given, and which applies especially to France, is the new process invented by Solvay, which seems to hold about the same

relation to the soda-producing industry that the Bessemer process does to that of steel. This process, by which soda can be produced from salt and ammoniac, has been adopted in France, while in England and Germany the system of Leblanc is kept in vogue. The Solvay method is employed in but two German factories, the conditions of production here not favoring it.

#### GRAIN.

A leading commercial paper of Germany stated recently that while Russia had for some time past been making extensive shipments of breadstuffs to Western Europe her stock was now suddenly exhausted, and that the United States ruled the grain market of the world. The same paper added that Hungary, instead of having a surplus for export, must draw upon Russia for her deficiency, and that Southern Germany, Switzerland, and portions of France must look for their supply to Mannheim, which had taken the place of Buda-Pesth. The meaning of these statements will be better understood, perhaps, when it is explained that last year Mannheim received, by way of Rotterdam, about 26,000,000 kilograms of Russian grain, of which 90 per cent. came from Odessa and Nicolajeff. The importance of grain distribution at Mannheim is, therefore, largely due to the formidable rivalry of the water route from the regions of the Black Sea and Lower Danube to the direct route by rail. This year, however, and perhaps in future years, it will be much more due to another fact, and that is the American import; for since Hungarian and Russian breadstuffs can be delivered on the Upper Rhine more cheaply by water than by rail, it follows that American breadstuffs can reach that market with quite as much facility as their eastern rivals.

For some time past the import of grain from the United States, both through the Rhine and North Sea ports, has been immense. Prices at Mannheim and Hamburg have kept pace with those in New York, an advance of about 30 per cent. having taken place since the middle of September. Much doubt is expressed as to whether prices can be maintained at such extraordinary figures, but there is no question that they will continue to rule much higher than those of one year ago.

The grades of American wheat best known in this and other West German markets are those of California, Oregon, Minnesota, and Michigan, and also the general grades of Milwaukee and Chicago. These kinds, and especially those known as Red Winter, Oregon, and California, are of very satisfactory quality, and yield at least as much flour as the best domestic varieties. The kind which is esteemed as the nearest approach to the favorite Hungarian red wheat, and which is pronounced even better than that, is the best spring wheat of Minnesota, of which the supply, as yet, has not equalled the demand.

It seems scarcely worth while to remark that the effect of the new tariff duties upon the American grain import has not been perceptible. There is a widespread belief, however, that these duties will not long be permitted to stand.

#### LEATHER.

The amount of imports of leather to Germany in 1878 is stated at 111,889 centners, and of exports at 130,454 centners. Of the imports 48,800 centners were of American production. The imports of American hemlock leather are believed to have increased during the past year, though the general import has diminished. The new duties, which take effect on the first of January next, were opposed by the saddlery, shoemaking, and other leather-consuming interests, owing to apprehen-

sions of unfavorable consequences to their business. These apprehensions took rise mainly from the supposed operation of the duties upon the import of American leather, which there is reason to believe will be seriously interfered with when the tariff comes into force. It is to be added that the advance in prices which has taken place in the American leather market during the last few months has not been followed by a corresponding advance in Germany. The German tanner will be quite content with the duty advances if, at the same time, he may be relieved of the pressure of American competition.

Hides and skins, on which no duties have been levied since 1818, are continued on the free list. This is due to the fact that the domestic tanneries are not fully supplied from Germany, and that the German tanner cannot sustain an additional tax upon his raw material. Skins for the manufacture of furs were taxed from 1833 to 1870, but they are now kept on the free list by way of encouraging a flourishing interest which has grown up in Saxony.

Of bark for tanning Germany now imports about one and a half million centners per annum. This import, which is ten times greater than it was in 1864, comes mainly from Hungary and the United States. Great efforts are being made in the way of forest culture to insure a future home supply, but as yet the foreign bark, and especially the American, is cheaper than the German, and, being indispensable, is left free of duty. At the same time, it is suggested that the Americans should devise some means to remove a portion of the dyeing material from their bark, as in that way they would produce a quality of leather which, in color and finish, would be more acceptable to this market.

In this connection a new process for tanning upper and sole leather by means of mineral salt, which has been discovered by Herr Knapp and perfected by Dr. Heinzerling, of this city, deserves mention. It is claimed for this method that it effects a considerable saving in the expense of tanning by reducing the time and the quantity of vats and other fixtures necessary. Light hides, it is said, can be dressed in three days, and the heaviest in from four to five. The process, of which a description is herewith given, is being tried in various tanneries of this vicinity.

*The Knapp tanning process, perfected by Dr. C. Heinzerling, of Frankfort-on-the-Main.*

The raw hides are unhaired and swelled in the ordinary manner, and are then placed in a solution of sour bichromate of potassa, or sour chromate of soda, or sour chromate of magnesia and alum, or sulphate of alumina and salt. They remain in this solution for a few days, according to the thickness and quality of the hides and the concentration of the solution.

Instead of placing the hides directly into one of the above solutions, they can be first submitted to the action of a solution containing about 10 per cent. of alum and some small pieces of zinc. By the action of the alum and the zinc, amorphous alumina (clay) is deposited upon the fibers of the hide and prevents an injurious action of the strong solutions. If the hides have been in the above solutions of soda or alum for a certain time, a small per cent. of ferro-cyanide or ferri-cyanide of potassa is added, which will prove very effective for the leather to be used for the uppers of shoes.

They are then placed in a solution of chloride of barium, or acetate of lead, or soap, for a few days, to fix the tanning substances. They are then dried and treated in the ordinary manner with fat, or paraffine, or naphtha dissolved in benzine, and similar substances, to which a small quantity of thymol or carbolic acid should be added.

#### LIVE STOCK.

On live stock import duties were levied up to the year 1865 at the rate of 4 marks per head on horses and mules, 15 on oxen, 9 on cows, 6 on young steers,  $\frac{1}{2}$  mark on calves, 3 on fattened and 2 on unfattened hogs,

and  $\frac{1}{4}$  mark each on pigs, sheep, and goats. By virtue of the treaty of April 11, 1865, with Austro-Hungary, these duties as applied to that country were greatly reduced, and during 1870 the duties on all kinds of live stock except swine were abolished. It is claimed that this repeal was followed by a decline of exports and increase of imports of live stock disastrous to German interests. Germany is not so well adapted as her eastern neighbors to the raising of stock, owing to her lack of pasture lands. The best pastures for the fattening of cattle are found in Holstein, Hanover, and Oldenburg. In Holstein, which has the advantage of seaports, an association was formed some time ago for the importation of American cattle, with a view to fattening them there for the market. Considerable numbers have been brought over by the association, and many are now upon the Holstein pastures. Recently some of these cattle were slaughtered in this city with the most gratifying results. A practical butcher, familiar with the facts, pronounces the meat better than the German, while the bones, he says, are not so large as those of German beeves. He thinks American cattle may be thus imported and fattened to good advantage, notwithstanding the tariff. Other butchers, while admitting that the meat is greatly superior to that of the regular German cattle, say there is no profit in the importation, so far as this part of Germany is concerned. The Rhine provinces furnish no pasturage, and American beeves brought here must either be slaughtered at once, in which case the meat is not so good, or must be sent to North Germany to be fattened, in which case the expenses are too great. It is conceded, however, that American beef fattened in Holstein is readily taken in England at paying prices.

#### TOBACCO.

As yet the new duties on tobacco have had very little effect upon the manufacture or prices of that commodity. Before the duties took effect large stocks were imported, and most manufacturers have still a supply of the untaxed article. Almost all kinds of American tobacco are extensively consumed, but especially the Maryland, Virginia, and Kentucky seed-leaf and the Kentucky and Virginia stalks. These different varieties are manufactured into all the various sorts of pipe and chewing tobacco, cigars, and snuff. They are very much in favor, and cannot be entirely replaced, either in quality or popularity, from any other source. But since the heavy new duties have been laid the demand for all foreign tobacco has very much declined, and it is probable that the American import will be seriously affected. It may also be remarked that this year's crop of tobacco in the Bavarian Pfalz, and some other German districts, is pronounced better than usual.

#### CURED AND PREPARED MEATS.

In my dispatch No. 128, of March 31 last, mention was made of an alarm sounded by the authorities here, and at various other places in Germany, as to the use of American ham, by reason of alleged trichina infection. Careful inquiries were immediately made as to the grounds for this alarm. In reply to inquiries from this office, well-informed experts stated that no instance of trichinated poisoning from American meat had ever occurred here, or in this vicinity, within their knowledge. A reported case at Freiburg was referred to the consul at Mannheim, whose inquiries failed to confirm the truth of the newspaper statement. On the other hand, notices appeared in the papers of this city shortly

afterward of various cases of trichina poisoning which had occurred here and in Sachsenhausen. In three instances these reports were fully confirmed, but the infected pork was found to be German and not American. It is but fair to add that since that time statistics have been published in which it is alleged that during the year 1877 343 cases of trichinosis were discovered in imported American bacon. The total number of cases discovered, it is said, was 701 among 2,057,272 pigs slaughtered. The number of persons who suffered from trichinosis during the year was 138, and the proportion of swine infected was one in 2,800, against one in 2,000 in 1876. These figures are given for what they may be worth, without opportunity to verify or dispute them. But as to the inspection, it may be said that it is by no means universal or always accurate. In some places it has been discontinued by reason of the expense and trouble, and instances are not wanting in which it has developed diametrically opposite conclusions. A recent case of this latter kind is reported to have occurred at Merseburg, where a family was taken ill with alleged trichinosis. The pork was examined by no less than 100 inspectors, ten of whom declared it free from trichina.

These observations sufficiently show that under the present system of inspection other forms of sickness may be mistaken for trichinosis; that the inspection is by no means a sure safeguard against that ailment, and that the only certain protection is the thorough cooking of the flesh before eating it. They also show that the German consumers of pork have nothing to gain by rejecting the imported article, since the domestic contains at least quite as large a proportion of infection as the foreign, and even may, if the difference in the method of raising and fattening swine be considered, contain a much greater. At the same time it should not be forgotten that actual, or even reported, discoveries of infection in foreign meats are made the most of by domestic interests to prejudice the market against the imported article, and that American exporters should take every precaution to protect the reputation of their commodity.

The trade in American hams and bacon has vastly increased of late years, and bids fair to maintain itself in spite of the increased duties. Before those duties came there was a difference in cheapness of 5 to 7 cents a pound in favor of American hams, the quality of which is, at least, by no means inferior to the best German article. The difference in price may now disappear, but the demand, if the quality is maintained, will continue. It has also been suggested that American sausages might be profitably introduced in this market. The experiment is worth trying.

The trade in American canned meats has been considerably reduced in this vicinity. One dealer informs me that his business has fallen off three-quarters. This is due mainly to the additional duties imposed. There is no objection to the meats on the score of quality. On the contrary, none others are so highly esteemed or so universally used. The present stagnation in the trade is, no doubt, greatly due to the large surplus stock which has been imported. When that stock shall be exhausted the trade may recover ground in spite of the duties.

#### LARD.

American refined lard has entered into general household use in this part of Germany. There are establishments in this city whose chief business consists in the wholesale trade in this article, while German lard is almost universally sold at retail by the butchers. The imports

of American lard have been larger this year than last, great quantities having been brought over in anticipation of the tariff. The low prices in the early part of the year also accelerated the import. The duty is fixed at 10 marks per 100 kilograms, whereas lard was previously free. The price has, consequently, advanced to the extent of three-fourths of the duty, and the consumption for technical purposes, as, for instance, soap-making, has somewhat fallen off. But the article has become so fixed in the habits of the people, and is really so necessary to them, that the imports will probably be next year fully as large as this.

#### BUTTER AND CHEESE.

Owing partly to increased abundance in feed for cattle the prices of butter and cheese have been somewhat depressed the past year. The demand has partly fallen off by reason of the increased number of people who do not feel able, under the prices that have existed, to consume these articles.

The supply of cheese is derived mainly at present from Allgäu in Bavaria, Switzerland, Holland, Cleve on the Lower Rhine, and from Thuringia. The butter supply comes mostly from Middle and South Germany.

American butter is not sold in this market by reason of its dearness, and of its being salted, which does not suit the taste of the people. American cheese also does not correspond with the popular taste, which prefers a softer article. In North Germany, on the other hand, the trade in American butter and cheese is tolerably lively, and considerable quantities of these articles are imported every week.

#### CLOVER-SEED.

American clover-seed has been imported to considerable extent, but complaint is made that it does not stand competition with the French and some other European varieties, because it is not so well cleaned. The quality is equally good, and the price is equally moderate, but the difference in the cleaning makes a difference of about ten marks per centner in favor of the European seed.

#### COPPER.

During the past six weeks a curious movement has been going on in Lake Superior copper. About two years ago large quantities of this copper were brought to Germany in the form of ingots, and remained in store. Of late dealers have been buying all of this copper they could find and shipping it back to the United States. One dealer estimates that a million pounds have thus been returned from Germany within a short time. The explanation given is that, owing to recent advances in this copper, there is about 10 per cent. profit in sending it home. No fault is found with the quality. On the contrary, Lake Superior copper is rated among the very best varieties that come to the German market. It is much used in the manufacture of percussion caps and fine copper ware, requiring a material which can be beaten out to great thinness without losing its tenacity. But since exported American copper can be reimported in the same form free, while Australian copper, of similar quality, would be obliged to pay duty, the former is sent to the United States, and the latter, though it costs about 2 per cent. more than the American copper, is retained. The movement is purely a commercial one, and is one of the singular features of the reversed balance of trade.

## EXPORTS TO THE UNITED STATES.

It is the opinion of intelligent persons that the exports from Germany have increased very considerably of late. The new movement in iron has already been referred to. For glassware, chemicals, dyes, hatters' fur, diamonds, hand-made goods, and a great variety of small articles, there has been also an increased demand. The extent of this increase, and also the kinds of wares exported, are set forth in the tabular statement of exports to the United States during the year ended September 30, 1879, hereto appended. The increase of those exports during that year from the consular territories within this jurisdiction amounts to over a million and a half of dollars; yet there can be no doubt that the imports from the United States are as yet at least twice as great as the exports to that country.

## AMERICAN TRADE.

In considering the ways and means for improving trade in American wares in this part of Germany, it has been my object to ascertain the objections, if any, made to those wares, and the obstacles to their sale. If manufacturers once understand precisely what hinders the marketing of their goods abroad, they will be far better prepared to overcome the hinderances than if only the favorable side is presented to them. For this reason the following words from an intelligent German dealer in American goods are here quoted:

In a great measure the cause of failures in introducing American goods lies with the manufacturers. They are apt to forget that a country of old, established habits is not swift to adopt new things from across the sea. It takes a great deal of time, trouble, and expense to induce people to buy even a superior article if they are used to a different style. Now, I have had a great deal of experience with American manufactured goods. I credit your manufacturers for much energy and the excellent quality of their wares, but I find them much disinclined to adapt their productions to any other country than their own. The trade in cotton goods, which was very promising in the beginning, has become very small. A great many trials have been made in introducing American boots and shoes, but the styles and shapes were such as to preclude the possibility of success.

Another cause of failure lies in the impatience of American manufacturers to build up a trade suddenly. They naturally like to have big orders to begin with, and are apt to despise too much the difficulties of educating an old country in the use of unaccustomed foreign articles.

American harvest tools, which have become popular in this country, will remain so if the many rival patterns which are sometimes sold cheap at the expense of quality do not bring these articles into bad repute. American mechanics' tools do not find their way rapidly into this market, because the people cling too firmly to their old habits. A good many very practical machines for dairy and household purposes find a ready market. Boot-making machinery, as well as many agricultural machines, are successfully imported; also shoe-pegs, for which America has nearly a monopoly.

To introduce American goods successfully, manufacturers must not be afraid to venture some samples and incur some expense. Intelligent agents for the various manufacturers ought to canvass the districts, show samples, and make people aware of their merits.

Another experienced dealer in American wares (an American) says:

The bulk of my importations from the United States consists of clocks, jewelry, paper, envelopes, wooden and iron ware, and all sorts of so-called Yankee notions. On the importation of all these articles the new German tariff will have very little influence, with the exception of clocks, and if our manufacturers will make the cases of their clocks less heavy, which I think can be done without injuring the looks or quality of the article, even clocks will still be imported.

There seems to be an opening here for the following articles: Table and pocket cutlery, scissors of all kinds, pressed glassware, iron stoves and ranges, woolen blankets, soap for laundry purposes, and lead pencils. These latter I know have been imported here with great success and profit to one American firm, and there is still room



for other manufacturers in this line if they will make arrangements with one good house here.

In nickel plating the United States excels all other countries. There are many small articles of this kind made in America which would sell here in large quantities.

The dealer whose words have just been quoted greatly deprecates the practice of many American manufacturers of endeavoring to undersell each other, and of rushing their goods upon the market regardless of each other's interests. German buyers avail themselves of this recklessness and rivalry by waiting for the lowest offer, and learn to expect that prices will be beaten down. A better plan would be to place the sales in the hands of a few responsible persons, and insist that for good articles fair prices shall be had.

In reference to manufactures in wood the suggestions may be repeated which have been made in previous reports. The qualities of American wood are so much superior to those grown on this continent as to offer the American manufacturer almost unrivaled advantages in the exportation of woodenware. In this connection it may be mentioned that pine flooring from the United States has lately been much used in this city and is very much liked. American perforated-seat and splint-bottom chairs are also popular, and should have a much larger sale than they now have. Handles for tools, tubs, spokes and rims for wheels, and shoe-lasts, if of the German patterns, ought to sell.

American locks, if adapted to the notions and habits of the people, might find a good market.

Roofing-slates are still extensively imported from the United States, and are preferred to those from the Rhine quarries.

Fresh oysters have been brought over in small quantities, packed in ice, and were found to be of good quality. They would have no competition here if they could be delivered in even moderately good condition.

It would be a great blessing to this country if the American railway baggage-check system could be introduced. With that convenience the traveling public might, perhaps, wait with some patience for the further much-needed ones of palace, hotel, and sleeping cars on the American plan.

#### GERMAN PATENT LAW.

One of the greatest difficulties and dangers to the trade in American goods in Germany is found in the cheap and worthless imitations of them which are placed upon the market. There are two remedies for this. The first and most effective is that of maintaining the superior quality and high character of American wares. Any attempt to fight shoddy with shoddy will only injure the trade and prove unprofitable.

The second remedy is that of protecting American inventions, so far as possible, with German patents. Unfortunately this is only a qualified advantage, for, in order to make it effectual, it is necessary that the German patent should be obtained before a home patent has been issued. This is due to the provision of the law which excepts from its benefits any invention which has been previously described in any printed publication. As the issue of an American patent is accompanied by printed specifications and drawings, the inventor cannot avail himself of the German law unless he obtains a German patent first.

Formerly fifteen or twenty different patents for as many different provinces were necessary, but the present law is good for the whole empire. The old patents protected only against imitations by manufacture, but not against sale of the patented article when manufactured abroad, except in the case of machines and tools. The present law protects also against

sale. The German patent law does not, like the French one, forbid the patentee to introduce the patented article from abroad, nor does it, like the laws of France, Austria, and Belgium, oblige the inventor to manufacture his invention within a certain time within the country issuing the patent. The mere presence of the patented article in Germany is sufficient to satisfy the requirements of the law in this respect.

In this city about one hundred German patents annually are taken out by American inventors. The process is simple, and is sufficiently described in the law, of which an English translation is hereto appended. The entire cost is about 50 marks, or, say, \$12.

#### QUININE.

Within the German Empire there are five quinine manufactories, of which Prussia, Württemberg, Baden, Brunswick, and Hesse have one each. England, France, and Italy have each two. The most important German establishments are those of Zimmer, in this city, of Böhringen, in Mannheim, and of Jobst, in Stuttgart. The Zimmer establishment, in Frankfort was founded by Dr. Conrad Zimmer in 1837 and soon acquired considerable renown. It is now a thoroughly complete and very extensive establishment, having probably no superior on the Continent in these respects. It consumes about fifty bales of cinchona bark, and produces about fifty kilos of quinine daily. The total yearly product of quinine in Europe and America is estimated at from 80,000 to 100,000 kilos. The Zimmer establishment produces about one-sixth of that amount.

The principal preparations of the German establishments are the sulphate and muriate of quinine. Of unbleached, or so-called hospital, quinine, made from various alkaloids, they produce very little, while the cinchonidia sulphate is manufactured in large quantities, especially for export to the United States. The efficacy of this drug is said to be similar to that of quinine, while its price is but one-third or one-fourth that of the sulphate of quinine.

Among the numerous other salts and preparations of quinine made in Germany are chiefly to be mentioned the preparations of the amorphous quinines, especially the muriate. These preparations, being perfectly soluble, are much employed for injections in cases of fever resulting from wounds, and are therefore of particular importance to army hospitals.

German manufacturers procure their cinchona bark mostly from London or Paris, which are the principal markets for that commodity. The bark is also brought extensively to Amsterdam from Java by the Dutch Government, and of late years occasional lots have been imported at Bremen. The Western States of South America, especially Bolivia and New Granada, formerly supplied almost the entire demand for cinchona bark for Europe and America. The forests of those States at that time abounded in cinchona trees, which it was only necessary to cut down and peel. The bark of the trunks, branches, and roots was packed in neat's hides and sent to the seashore for exportation. Nobody thought of saving or replanting the trees.

This system of extirpation eventually forced a change. The gatherers of bark were obliged to go deeper and deeper into the forests, and finally to ascend the mountains, so that while their labor and expenses increased the results decreased. The supplies of bark were so much reduced that its prices and those of quinine rose to an extraordinary height. At this juncture England introduced the first systematic management of cinchona plantations, and for this purpose chose the heights of the Nil-

Gerris, in the Deccan, India, that region having the nearest climatic and other resemblances to the countries where cinchona was originally found. Holland followed this example, and founded cinchona plantations in Java. These enterprises were followed by similar private ones, among which was that of the Zimmer factory at Frankfort, which bought, about two years ago, large territories in Java, and now employs about two hundred natives in clearing ground and planting cinchona. Meanwhile the difficulties which had been encountered had inspired a careful study of the cinchona tree, which, as is now known, will replace by a new growth the bark of which it is deprived, provided it is not entirely denuded. The India and Java supplies have therefore grown to some importance, and the South American exporters no longer monopolize the market.

Heretofore the prices of quinine have been subject to more sudden and violent fluctuations than those of most any other prominent commodity. These fluctuations were due mostly to artificial causes, which it is now believed and hoped are rapidly diminishing.

#### UNITED STATES BONDS AND CREDIT.

No financial event of recent times has created so much astonishment in Germany as the recent refunding operations of our government. In this city of great banks and famous financiers it created surprise bordering upon amazement. The resumption of specie payments in the United States had already created a profound impression, though it was an event confidently predicted and expected. There had been some uneasy feeling among holders of American securities, owing to the tone of some Congressional discussions and of some financial legislation that seemed to be impending. Resumption at once put all these misgivings at rest and advanced the credit of the United States in every house in Europe to a position equal to that of any other country in the world. It holds that position to-day, and by that fact and the events which have led to it has been created a profounder impression of the wealth, power, and integrity of the American Union than by almost any other episode in its history.

Nevertheless, with this fact accomplished, there was great incredulity among financiers here as to the success of the proposition to refund the five and six per cent. bonds into fours, and bewilderment followed doubt in the minds of many when that measure also was quickly carried into execution. The London Times, speaking of the matter seven months ago, and mentioning that the foreign agents had not received as much as they desired of the new four per cent. loan, added that their readiness to take it at par was the most practical proof that could be offered of the reputation of United States securities on European bourses. In this city those securities had always been the favorite investment, and the fours are and have been taken daily here in spite of other more profitable investments offered. The Imperial German loan, for example, can be had about 6 per cent. lower; that is to say, at 96 and 97, while United States fours are quoted here at 101 and 102.

Nevertheless, the amount of our national securities held in Frankfort has been very much reduced. Two years ago the best-informed persons estimated it at \$100,000,000. The same persons would not place it now above \$15,000,000, and others think it is much below that. During the past twelve months, as during the preceding twelve, there has been a continual flow of the bonds homeward. That current has been much accelerated since the great inequality has grown up in favor of the

United States in the balance of trade. Americans have been constant buyers of their national bonds, and there has been no time, even the most unfavorable, when they did not take all that were offered and all they could get. The bulk of the bonds returned have been called bonds, but some have been given up by the holders because they could get, with satisfactory though not so good security, higher rates of interest. Yet first-class home investments are not abundant here. There is still an uneasy, anxious feeling as to the course of public affairs, and uncertainty as to the best disposition of capital. Among the most popular investments offered at present are the Imperial German loan and those of Russia, Bavaria, Württemberg, and Baden, together with the bonds of some continental railways.

It should not be omitted that the credit of the United States has not been alone in the advantage derived from resumption and refunding. Cities, States, railways, and other American corporations, public and private, whose bonds and stocks are held here, have gained much more than the government, for such securities, if reasonably good, have advanced from 20 to 25 per cent. under the stimulus of improved national credit and the demand for new investments.

#### BANKING.

The business of banking has generally improved during the past year, although confidence has not been fully restored, and the demand for money has not been greatly increased for industrial purposes.

In the business of the banks of issue great fluctuations have taken place. Since the 31st of October, 1878, the note circulation has increased about 83 million marks, and the note reserve, free of tax, has diminished about 42.5 millions. In the month of September the banks increased their available capital in the aggregate about 91.3 millions over that of August. This increase embraces 55.3 millions of bills of exchange, 23 millions of discounts, and 13 millions of stocks owned by the banks. At the end of September, 1878, the available capital had increased about 55.4 millions, the increase consisting of 28.5 millions in exchanges, 8.9 millions of discounts, and 18 millions of stocks.

These figures, however, are not believed to fully represent the increase of business which has taken place. Since the rate of interest during recent months, and especially during September, was decidedly lower in England, France, Belgium, and other countries than in Germany, it is supposed that a large number of Reichsmark exchanges have remained abroad. This circumstance, attributed in the first instance to the gold standard, comes very opportunely to the German money market in a period like the present. The situation would be materially changed, however, should the rate of interest in London and Paris approach or transcend that prevailing here, in which case the Reichsmark bills would come quickly back and make an unusually strong claim upon the bank reserves.

The cash on hand decreased in September 41.6 millions, against a decrease of 30.9 millions in September last year. The course of exchange during the entire month having been in favor of Germany, the decrease of cash represents the inland trade demand. On the other hand the month of October, during which a decrease of cash in bank usually takes place, has this year, owing to the unusually low course of exchange, brought an increase of 11.6 millions.

The deposits to cover circulating notes were, at the end of October,

66.99 per cent.; September, 64.93; August, 79.35; July, 79; June, 73.34 May, 81.92, and April, 79.18.

The cash to cover notes and circulating credits, including money, imperial notes, and notes of other banks, was, at the end of October, 60.8 per cent.; September, 58.91; August, 65.70; and July, 65.40.

#### THE IMPERIAL BANK.

The aggregate transactions of the Reichsbank for the year 1878 amounted as follows:

	Marks.
Chief bank, in Berlin .....	11, 616, 521, 400
Branches .....	32, 638, 192, 300
Total .....	44, 254, 713, 700

This total is 3,286,906,100 marks less than that for 1877.

The average rate of discount during the year was 4.34 per cent., and the average rate of interest 5.34, against 4.42 and 5.42, respectively, in 1877.

The owners of the bank shares were distributed as follows:

	Shares.
December 31, 1877:	
6, 346 Germans, owning .....	28, 959
1, 425 foreigners, owning .....	11, 041
	40, 000
December 31, 1878:	
6, 240 Germans, owning .....	28, 618
1, 450 foreigners, owning .....	11, 382
	40, 000

The deposits reached their highest amount, 16,295,000 marks, on the 7th of April, and their lowest, 9,441,000, on the 31st of December. The average amount of deposits during the year was 12,358,000 marks, against 22,421,000 in 1877. The interest paid was 2.22 marks per 100, against 2.41 in 1877. The amount of interest which accrued on these deposits during the year was 274,672.42 marks.

The material decrease in deposits is declared by the management to be due to the notices of withdrawal of funds by guardians, trustees, churches, hospitals, schools, and benevolent institutions. Since May 31, last, the Reichsbank has been released from the obligation to pay interest on funds like these confided to its care, of which it can make no use.

The average amount of notes of the bank in circulation during the year (1878) was 622,642,000 marks, or 72,287,000 less than the average for 1877.

For the preparation of new notes, the sum of 183,836 marks was expended during the year.

The average amount of coin, German and foreign, on hand during the year was 494,072,000 marks.

The average amount of coin on hand to cover note circulation was 79.35 per cent.

Payments on account of the empire and its various states were made in the course of the year to the bank, amounting to 982,168,508 marks, and from the bank, amounting to 982,509,536.

The average credits during the year amounted to 109,999,000 marks, against 99,070,000 during 1877.

The decline in the total transactions during 1878 is partly due to in-

creased depression of business, but mainly to the reduction of government transactions, this latter reduction being due to the fact that the introduction of the single gold standard, the withdrawal of the silver currency, and the exchange of the Prussian mark-notes into German bank-notes, had been mostly completed at the end of 1877. The regular transactions with the business community did not differ greatly in amount from those in 1877. The greatest falling off in the regular business took place in discounts, and was due to the depression of trade during the year.

The increase in loans and deposits was also due to business stagnation, causing idle funds to accumulate. The decrease of circulation was due to the same cause.

On the other hand, the profits of the bank slightly increased, the dividend to shareholders having been 6.30 per cent., against 6.29 in 1877, and 6½ in 1876.

The government was impelled by its losses from the heavy decline of silver to refrain from extensive sales of that metal during 1878. The bank's purchases of gold were therefore likewise small, which accounts for the decline of gold and bullion during that period.

As to the bank's transactions during the present year, no complete statement can be had until several months hence. They are believed to be larger than last year's, though the low rate of interest may prevent any increase of profits. It is known, however, that the discounts and exchanges during the second week of October were about 6,000,000 less than in the same week of 1878. The note reserve during the same week was 24,700,000 less than in 1878, and 7,900,000 less than in 1877. The reserve coin to cover notes amounted to 72.6 per cent., against 76.5 per cent. October 15, 1877. The tax-free note reserve amounted on the 7th of October to 72,510,000 marks, or 39,000,000 less than on October 7, 1878. The proportion of total cash reserves October 7 was 72.4 per cent., against 89.9 per cent. on the same date in 1878.

The purchases of gold from January 1 to September 30 amounted to 8,466,579 marks, in coin, and 24,654,622, in bars, against the sums of 3,960,000 and 57,650,000, respectively, in same period of 1878. During the latter part of September, reports were current that the bank had bought large amounts of French gold, but exact information shows that only a trifling amount was purchased.

Early in October the bank raised its rate of discount from 3.5 to 4, and later to 4.5 per cent. This was due in part to a demand for money for moving the crops, and partly to an improvement in business, but far more to the removal of gold from the bank to be sent to the United States against breadstuffs. The reasonably good crops of this year have moderated this movement of gold so far as Germany is concerned, yet still further advances of the rate of discount may be necessary. In France the export of gold has been such as to create alarm, and it is believed here that that country must send a half a milliard of francs to the United States before the end will be reached. The Bank of France has recently advanced its rate of discount from 2 to 3 per cent. The Bank of England has just done the same thing. It is evident, indeed, that the Banks of France, England, and Germany have lost a large amount of their gold reserve since the beginning of this year. The drain was endured without shock until, owing to the evident failure of crops, the immense purchases of breadstuffs from the United States began. Then the rates of discount advanced. Yet the purchases of grain are still far from being ended, and those of cotton are just beginning. What the result of all this will be can only be guessed, but intelligent men are not wanting

who believe that the Banks of France, England and Germany, may be obliged to advance their rates of discount to 6 per cent., or even higher, and that a financial crisis may be impending that will convulse all Europe.

#### CO-OPERATIVE SOCIETIES.

During the last year the union co-operative societies of Germany have made decided progress in numbers, membership, and essential strength. Exclusive of 18 societies which have been converted into joint stock companies, there are now 3,146, or 23 more than the previous year, known to the chief officer of the union. Of those known 1,841 are credit, 635 productive, 621 consume, or provision-supplying, and 49 building societies. The statistical exhibits being always more or less behind the increase by new organizations, the total number of societies in the empire is believed to be not far short of 3,300. The exhibits are equally behind as to other totals, as, for example, those of membership, capital, and business. Making due allowance for this fact, we have the following summary of the German co-operative organizations for the year 1878 :

1. Total membership over 1,000,000.
2. Total business transactions over 2,000,000,000 marks.
3. Total owned capital in business shares and reserves, about 170,000,000 marks.
4. Amount of accepted interest-bearing loans for carrying on business, about 400,000,000 marks.

These estimates are placed at the very lowest.

#### CREDIT SOCIETIES.

Of the credit or loan societies 948 have made official returns of their transactions, balances, and membership to the anwalt, or president of the union. These returns may be summarized as follows :

Aggregate membership end of 1878.....	480, 507
	<b>Marks.</b>
Owned capital .....	116, 735, 369
Borrowed capital.....	346, 596, 413
Total of both.....	463, 330, 782
Total advances and prolongations.....	1, 456, 003, 733
Net profits .....	8, 642, 465
Carried to reserves .....	1, 996, 677
Dividend to members.....	6, 307, 015

For the first time in twenty years there has been a decrease in the amount of credits granted, not only in the average per single society, but also in the total sum. This decrease, amounting to about 94,000,000 marks, indicates at once the depression of industry and the solid administration of the societies. This fact becomes more apparent when it is seen in what manner the reduction is distributed. Accounts current have shared the largest diminution, having fallen off about 615,000,000 marks. Next come bills of exchange, which have been reduced about 16,000,000; next credits on evidences of debt, embracing manifold loans on securities, which have fallen off 10,000,000 marks; next advances on mortgages, about 4,000,000 marks; and finally advances on loan bills, about 2,000,000 marks.

It is considered a sign of the beneficent operations of the societies that the branches of their business which are most important to the great mass of the members have suffered least contraction, while the credits to members least needing them have been notably reduced.

The loans on mortgage, which amounted to 12,665,635 marks in 1877, have been reduced to 8,313,958 marks, which, in view of the tendency in stringent times to increase this class of debts, is considered very gratifying.

There has also been a wholesome tendency towards increasing the proportionate amount of capital owned as compared to that held on credit. The former increased during the year 6,000,000 marks, while the latter decreased 4,500,000 marks. The proportion of owned to not owned capital is 33.68 per cent., which is higher than in 1870, the hitherto most favorable year in this respect. Since 1872 the average amount of owned capital per member has steadily increased from 191.9 to 242 marks per member. Considering that depressed business naturally impels industrial people to spend their earnings rather than to save them, this thrift is as gratifying as it is exceptional.

It is also significant that, while there has been a decrease of credits, there has been an increase of net profits. The gross profit, indeed, is about 230,000 marks less than in 1877, but the disbursement of interest has diminished 265,000 marks. At the same time the expenses of administration have somewhat lessened, and the losses covered by the corresponding year's profit are rather lower than last year, so that there is shown a net profit greater by 130,000 marks than that of 1877.

From 1872 to 1878 the losses for each year, respectively, averaged in marks per member as follows: 0.63, 3.48, 1.80, 3.49, 2.89, 3.83, 2.74.

The number of bankruptcies during the year (1878) was seven. These were occasioned by mismanagement.

Twenty-three liquidations during the year came to the knowledge of the anwalt, though most of the liquidated societies did not belong to the union. The proportion of liquidations and bankruptcies is insignificant considering the number of the societies, the extent of their business, and the stagnation of trade and production that has prevailed.

The increase of membership during the year was 9.3 per cent., against 11.1 in 1877. The number of withdrawals was 8.8 per cent. against 7.8 the year before.

A table showing the operations of the credit societies from 1859 to 1878, inclusive, is appended to this report.

#### CONSUME SOCIETIES.

Among the 202 consume societies reporting to the anwalt, there were forty-two liquidations during the year, and but one bankruptcy. Forty-two new societies were organized. Most of these placed themselves immediately in subordination to the union.

The operations of the 202 societies during the year may be epitomized thus:

Number of members.....	109,515
Increase of membership .....	9,653
	Marks.
Total proceeds of sales .....	28,601,934
Net profits .....	1,830,384
Added to reserves .....	141,967
Dividends .....	1,497,492

The average proceeds of sales per society amounted to 141,593 marks, against 131,204 marks in 1877.

The debts for wares diminished to the amount of 114,000 marks, and the debts on mortgage also decreased by a small sum.

Fifty-one societies yet sell on credit, but the number has lessened, and



the credits given are in many cases only for necessities, such as fuel and provisions. The habit of giving credits generally in all kinds of business in Germany has made reform in this respect peculiarly difficult.

The increase of membership amounted to 20.3 per cent., and the withdrawals to 15.5, against 19.7 per cent. increase, and 15.3 loss in 1877.

The members consist, as heretofore, of various classes, handworkers comprising 16.8 per cent., physicians, teachers, and the like 12.7 per cent., and farmers, gardeners, mechanics, sailors, and miscellaneous workmen 49 per cent. of the total membership.

A comprehensive epitome of the operations and progress of the consume societies from 1864 to 1878, inclusive, accompanies this report.

#### NEW JUDICIAL SYSTEM.

The civil and criminal courts of this city have been reorganized in conformity with the new judiciary law of the empire, which came into effect on the 1st of October last. The change is a popular one, and although the new law effects, as yet, but a partial generalization of the judicial system, it has opened wide the door for the progress and completion of that work.

It is now nearly four hundred years since (in 1495) a supreme court of justice, or imperial chamber, for Germany was established. In early times this court held its sittings in various imperial cities, especially in Speyer, and, after 1687, in Wetzlar. But like other contrivances of the old empire, this one became permeated by the weakness of the imperial body. Distant dominions in steadily increasing number renounced its authority until its jurisdiction became a shadow rather than a reality. The number of counsellors of the chamber, fixed by the Westphalian peace of 1648 at 50, was reduced by the Imperial Diet in 1719 to 25, of whom seldom more than half were paid, and these irregularly. The causes pending before the chamber and awaiting its dilatory decisions, estimated at 50,000 in 1620, had swelled to the number of 61,233 in 1772. It was not unfrequent that controversies involving great interests remained undisposed of for a period of a hundred years. Corruption also crept into the chamber, until, as was caustically remarked by Goethe, who had attended the sittings at Wetzlar, only those causes came to a conclusion in which one party or the other was able to make that result desirable to those having influence with the counsellors.

At length Prussia took the lead in the endeavor to establish a new tribunal having like functions but more practical ones than those of the imperial chamber. In 1834 a so-called federal empire court (*Bundeschiedsgericht*) was laboriously created, but it proved to be short lived. The free-chosen imperial parliament, which met in Frankfort-on-the-Main in 1848-'49, whose presiding officer (in 1848) was Dr. Simson, now president of the new supreme imperial court, then seized with force and decision the idea of establishing such a court for all Germany. Nevertheless the scheme remained a naked ideal though a devout wish. With the new confederation of the German people that wish has been realized, and the realization will doubtless prove one of the greatest blessings the empire has bestowed.

In 1868 a uniform penal code for all Germany was established. The work of preparing a like uniform code for civil practice has been accomplished by an imperial commission, at the head of which was Dr. Pape, first president of the supreme commercial court of the empire (*Bundesoberhandelsgericht*), established in 1869. The efficacy and usefulness of this commercial court, the jurisdiction of which was mainly limited

to questions of trade and copyright, gave the German people a taste of the advantages of a like tribunal applicable to all classes of judicial questions. The progress from such a court to one which should embrace within its scope the whole commercial and social life of the nation was natural and has been direct.

A detailed sketch of the new judicial system, or of the supreme imperial court in which it culminates, will not be attempted. In this city the new tribunals are three in number, and are in the order of their subordination, beginning with the lowest, the *Amtsgericht*, *Landgericht*, and *Oberlandesgericht*. The *Landgericht* sitting here embraces the three *Amtsgericht* jurisdictions of Bockenheim, Homburg, and Frankfort-on-the-Main. The *Oberlandesgericht* embraces a wide extent of territory, including the *Landgericht* jurisdictions of Frankfort (where the sittings are held), Neuwied, Limburg-on-the-Lahn, Wiesbaden, and Hechingen, in Würtemberg.

At another time it may seem to be my duty to advise the Department of the more particular organization of these courts, their rules of practice, and their efficacy in the administration of justice.

ALFRED E. LEE.

UNITED STATES CONSULATE-GENERAL,

Frankfort-on-the-Main, November 1, 1879.

#### SUPPLEMENT TO CONSUL-GENERAL LEE'S REPORT.

*Productions, profits, losses, and declared dividends of various industrial and other business institutions in the German Empire during the year 1878-'79.\**

#### MANUFACTORIES.

**Bamberg.**—Cotton factory, spinning and weaving. Capital stock, 3,000,000 marks; dividend, 6½ per cent., with a surplus of 7,000 marks carried forward for the new year.

**Augsburg.**—Senkelbach Cotton Spinnery. Capital stock, 514,285 marks. This establishment lost 47,643 marks on its business in 1877 and 69,129 marks in 1878. Its reserve fund of 46,300 marks has entirely disappeared.

**Heidenheim, Würtemberg.**—Capital, 1,600,000 marks; dividend, 11½ per cent., besides 28,321 marks added to the reserves, making the latter aggregate 300,000 marks. The export trade of this establishment increased largely during the year.

**Chemnitz.**—Steam Engine and Spinning Machine Manufactory. The gross profits were 135,105 marks, of which 87,105 marks were applied to redemption of liabilities. A dividend of 2 per cent. was declared, against 1 per cent. the previous year.

**Culmbach.**—First Joint Stock Export Brewery. Dividends, about 7 per cent., after applying 130,000 marks to redemption of liabilities and 50,000 marks to the reserves. The dividend of the previous year was 6 per cent., and of the year before that 3½ per cent.

**Hamburg.**—Winter Paper Factory. Dividend, 2½ per cent.; an increase over former year.

**Zittau.**—Foundry and Machine Factory. Dividend, 4½ per cent.

\* Values stated in marks. One mark = 23.8 cents United States gold. Weights stated in kilograms. One kilogram = 2.2 pounds avoirdupois. One centner = 110.23 pounds avoirdupois.

*Dortmund*.—Joint Stock Gas Company. Dividend, 15 per cent.

*Leipzig*.—Schlonditz Malt Factory. Dividend, 6 per cent., against 4 per cent. the previous year.

*Chemnitz*.—Hartmann Machine Factory. Production amounted in value to 4,683,286 marks, against 6,114,852 marks in the previous year. Dividend, 75,000 marks, against 90,000 marks in preceding year. Reduction of capital stock contemplated.

*Brunswick*.—Joint Stock Jute and Flax Factory. Dividend, on original shares, 3 per cent.

*Harburg-Stassfurt*.—Manufactory of Chemicals. Dividend,  $7\frac{1}{2}$  per cent.

*Augsburg*.—Machine Factory. Dividend, 7 per cent. Preceding year nothing.

*Rhenish*.—Westphalian Powder Factory. Dividend,  $7\frac{1}{2}$  per cent.

*Barop*.—Joint Stock Machine Works. Profit, 19,328 marks.

*Brunswick*.—Steam Mill Company. Dividend, 4 per cent.

*Frachenberg*.—Joint Stock Sugar Refinery. Dividend, 17 per cent.

*Schalke, Westphalia*.—Glass and Mirror Manufactory. Loss, 320,827 marks.

*Ilmenau*.—Porcelain Manufactory. Dividend, 15 per cent. Capital to be raised from 120,000 marks to 180,000 marks.

*Korbetha*.—Glass and Chemical Works. After several years of unfavorable business the establishment has become insolvent. The capital, which originally amounted to 1,200,000 marks, has been reduced to 600,000 marks.

*Dresden*.—Union Straw Hat and Feather Factory. Dividend, 4 per cent. against  $1\frac{1}{2}$  per cent. the year preceding.

*Langensalza*.—Joint Stock Malt Manufactory. Dividend, 11 per cent.

*Bietighum*.—Spinnery. Manufactured 111,900 pounds more yarn than in previous year. Dividend last year 5 per cent., this year 7 per cent.

*Ellenburg*.—Cotton Factory. Dividend this year and last 2 per cent.

*Leipzig*.—Union Brewery. Dividend last year 20 per cent., this year 22 per cent.

*Mannheim*.—Sugar Refinery. Dividend, 40 marks per share, or  $4\frac{2}{3}$  per cent.

*Heilbronn*.—Sugar Factory. Dividend, 4 per cent. on stock shares and 6 on preferred shares, against 8 per cent. on both the year preceding.

*Salzungen*.—Joint Stock Salt Factory. Sales increased 10 per cent. Cost of production decreased 12 per cent. Net profit 105,464 marks. Dividend,  $4\frac{2}{3}$  per cent.

*Robschütz*.—Paper Factory near Dresden. No dividend.

*Oberursel*.—Joint Stock Spinning and Weaving Company. Losses during the year 47,630 marks.

*Munich*.—Dachau Paper Factory. Dividend,  $17\frac{1}{2}$  per cent; about one per cent. more than in the preceding year.

*Aix-la-Chapelle*.—Rhenish Cloth Factory. Sales increased over those of previous year 120,000 marks. The profit advanced from 97,349 to 132,853 marks. Dividend,  $7\frac{1}{2}$  per cent.

*Bauzen*.—Mörditz Cloth Factory. No dividend.

*Penig Paper Factory*.—Net profits, 312,000 marks, or more than 10 per cent. of the capital shares.

*Mannheim*.—Rheinau Chemical Factory. Dividend of 60 marks per share.

*Offenburg*.—Spinnerei and Weberei. Dividend, 60 marks per share. This dividend was partly obtained from the sum of 31,205 marks gain carried forward from the previous year.

*Dürkheim*.—Salt and Salt Bath Company. Dividend,  $4\frac{1}{2}$  per cent.

*Friedensau*.—Sugar Refinery. Dividend  $3\frac{1}{2}$  per cent., against 6.42 per cent. the preceding year.

*Henfield*.—Manufactory of Agricultural Chemicals. Business was extended during the year, but remained unprofitable. Loss 30,000 marks.

*Zweibrücken*.—Joint Stock Gas Company. Dividend  $11\frac{1}{2}$  per cent.

*Dresden*.—Sewing Machine Factory. Sales 217,522 marks, against 149,465 marks in preceding year. Profit 106,454 marks.

*Erdmannsdorf*.—Joint Stock Machine Flax Spinning and Weaving Company. The sales of yarns amounted to 1,091,060 marks, and of textiles to 1,418,063 marks. Loss this year 296,000 marks, and last year 94,040 marks.

*Stassfurt*.—Chemical Factory. Sales 1,516,773 marks, against 1,437,410 marks in 1877-'78. Net profit 165,375 marks against 155,775 marks in 1877-'78, and 99,416 marks in 1876-'77. No dividend declared for the reason that profits had to be applied to outstanding mortgage obligations.

*Cönnern*.—Joint Stock Malt Factory. Dividend 8 per cent.

*Chemnitz*.—Vulcan Tool Machine Works. Sales increased 17,000 marks. Loss 42,466 marks.

*Sebnitz*.—Paper Factory. Production 1,978,792 kilograms of paper, an increase of 92,721 kilograms over year 1877-'78. Dividend 7 per cent.

*Witschdorf*.—Saxon Sewing Thread Factory. Capital 2,550,000 marks. Production of thread 397,728 English pounds, an increase of 57,331 pounds over the previous year. Production of twines 173,810 German pounds, an increase of 18,309 pounds. Net profit 54,778 marks. Dividend 1 per cent. on capital.

*Hopf*.—Paper Factory. Sold by order of court for 350,000 marks.

*Lützen*.—Sugar Factory. Dividend 50 per cent.; preceding year 66 $\frac{2}{3}$  per cent. Previously profits had been small.

*Rhenish and Westphalian Powder Factory*.—Production 77,811 centners, for which the receipts were 4,401,693 marks, against 111,633 centners, for which receipts were 6,611,071 marks in 1877-'78.

*Kramsta*.—Silesian Joint Stock Linen Factory. Capital 9,900,000 marks. Profit 861,708 marks. Dividend 5 per cent. Amount added to reserve fund 30,000 marks.

*Moabit*.—Union Chemical Manufactory. Dividend 3 per cent., same as in 1877-'78. Sales 741,755 kilograms of acids, and 5,027,754 kilograms of superphosphate manures, leaving an amount on hand of 455,132 kilograms.

#### IRON AND STEEL WORKS.

*Hamm*.—Westphalian Wire Company. Dividend  $4\frac{1}{2}$ , possibly 5 per cent., an increase over preceding year.

*Wilhelmshütte*.—Joint Stock Iron and Machine Company. Deficit for the year 209,350 marks, making the total deficit 349,330 marks.

*Bochum*.—Cast Steel Association. Dividend 2 per cent.

*Döhlen*.—Saxon Cast Steel Works. Dividend 2 per cent., same as preceding year. Production less than year before.

*Bavaria*.—Maximilian Iron Works. Dividend 400 marks per shares.

*Meiderich*.—Dividend 6 per cent. on the priority shares.

*Aplerbeck*.—Iron Works of Brüggmann, Weyland & Co. Production 36,265,000 kilograms of raw iron, against 34,706,450 kilograms the year before. Dividend  $7\frac{1}{2}$  per cent., same as in 1877-'78.

*Annen*.—Joint Stock Cast Steel Company. Amount shipped 1,604,700 kilograms, worth 761,700 marks, against 987,000 kilograms, worth 561,200 marks, in 1877-'78. Loss in business 9,998 marks.

*Hagen*.—Cast Steel Works. Profit 45,887 marks, which was applied to payment of outstanding liabilities. Arrears 123,085 marks. Capital stock to be reduced from 2,250,000 marks to 937,500 marks.

*Aix-la-Chapelle*.—Red Earth Joint Stock Foundry and Smelting Works. In June, 1879, employed 1,040 workmen. Production increased to 71,730,939 kilograms of wares, against 61,045,294 kilograms in the previous year. Net profit 87,930 marks. Dividend to shareholders 4 per cent.

*Ars an der Mosel*.—Lorraine Iron Works. These works cost originally 15,000,000 francs, exclusive of subsequent improvements. The capital stock consisted of 30,000 shares, nominally equal to 18,000,000 marks. During the year 9,125 shares were canceled, owing to delinquencies in payments, and the capital stock was thereby reduced to 12,525,000 marks. A further reduction of the capital stock to 6,262,500 marks is contemplated. Expenses were reduced during the year to 152,530 marks, from 181,364 marks in the previous year. The net profits amounted to 111,391 marks, against 138,901 marks the year before.

*Bochum*.—Mining and Cast Steel Association. Dividend 2 per cent.

*Hagen*.—Cast Steel Works. Wares produced exceeded in value by 199,639 marks those of the previous year. Gross profit 64,400 marks, applied in redemption of outstanding liabilities. No dividend declared.

*Willen*.—Cast Steel and Fire Arms Manufactory. Is able to produce from 260 to 300 muskets per day. Accounts against the Roumanian Government paid. Balances for the year close with a loss of 149,744 marks.

*Lüneberg*.—Lüneberg Iron Works. A further decrease of sales took place from June, 1878, to June, 1879. Gross profits 77,978 marks, against 110,569 marks in 1877-'78. Net profit 31,067 marks, against 59,380 marks in 1877-'78. Dividend  $3\frac{1}{2}$  per cent., exclusive of amount drawn from previous year's profit.

*Radeburg*.—Saxonia Iron Works. Makes railway iron. Business improved, but not sufficiently to justify a dividend.

*Consolidated Smelting Works (Redenhütte)*.—Dividend 4 per cent.

*Kozenau*.—Marien Iron Works. Dividend  $2\frac{1}{2}$  per cent., against 3 per cent. in the previous year.

*Dortmund*.—Prussian Mining and Smelting Company. Total debts amount to over 26,000,000 marks, of which 25,000,000 marks are mortgage debts. From sales of several of the company's works only 158,121 marks were realized. Creditors received nothing, and law expenses were paid with difficulty.

*Queen Maria Smelting Works*.—Dividend  $4\frac{1}{2}$  per cent. on reduced capital of 6,000,000 marks.

#### MINES.

*Dortmund*.—Mark Joint Stock Mining Company. Net profit 24,518 marks.

*Haen*.—Joint Stock Mining Association. Dividend 2 per cent., against 1 per cent. the preceding year.

*Hartz Coal and Coke Company*.—Expended 293,512 marks on improvements. Dividend  $2\frac{1}{4}$  per cent.

*Hoerde*.—Louisa Coal Mine. Dividend, 2 per cent. Profit larger than preceding year.

*Phoenix Mining and Smelting Company*.—Declared no dividend, but expended 188,887 marks on improvements.

*Cologne Mining Company*.—Dividend 2 per cent.

*Gelsenkirchen*.—Bonifacius Mining Company. Total losses during the

year, 134,506 marks. The company's sales amounted to 3,641,228 centners.

*Dannenbaum Coal Company.*—Amount mined, 5,087,220 centners. Expenses and interest on capital were paid, but no dividend was declared.

*Essen.*—Neussen Mining Company. Dividend, 10 per cent.

*Doerstewitz Rattsmannsdorf.*—Brown Coal Company. Capital shares, 1,500,000 marks; gross profits, 246,426 marks; dividend, 75,000 marks.

*Atzendorf.*—Capital, 2,250,000 marks; net profit, 172,554 marks; dividend, 5 per cent.

*Tarnowitz.*—Joint Stock Mining and Iron Smelting Company. Cannot declare a dividend; cost of production having lessened, a loss may be prevented. Advance in selling prices to be made.

#### BANKING INSTITUTIONS.

*Ludwigsburg.*—Co-operative Loan and Savings Bank. Amount of original shares, 331,000 marks; amount of transactions during the year, 5,400,000 marks; dividend,  $7\frac{1}{2}$  per cent.; net profits, 27,878 marks. Number of members, 607.

*Achern.*—Co-operative Loan Society. Net profits, 2,316 marks; dividend, 6 per cent. Number of members, 368.

*Hofer.*—Co-operative Credit Society. Amount of shares, 111,294 marks; amount of transactions, 5,200,000 marks; net profit, 14,766 marks; dividend, 7 per cent.; amount added to reserves, 2,907 marks. Number of members, 492.

*Posen.*—Farmers' and Mechanics' Bank. Dividend,  $4\frac{1}{2}$  per cent.

*Eisleben.*—Discount Banking Company. Transactions amounted to 28,586,180 marks; a slight increase over the previous year; net profit, 118,694 marks; dividend, 11 per cent.

*Landau.*—People's Bank. Total transactions, 14,200,000 marks; net profits, 46,970 marks; and a dividend of 5 per cent., against 51,949 marks net profit and 7 per cent. dividend in 1877.

*Fulda.*—Co-operative Loan Association. Total transactions, 4,000,000 marks; net profit, 29,661 marks; dividend, 10 per cent.

*Dietz.*—Co-operative Loan Association. Dividend, 9 per cent. At the close of the year the association had 1,517 members, and capital shares amounting to 134,577 marks.

*Mellrichstadt.*—Co-operative Loan Association. Net profit, 4,076 marks; dividend, 6 per cent.; capital, 27,951 marks. Number of members, 531.

*Alzey.*—Co-operative Loan Association. Total transactions, 5,500,000 marks; net profit, 12,602 marks; dividend, 6 per cent.; capital, 151,183 marks. Members, 401.

*Bamberg.*—Co-operative Loan Association. Dividend, 5 per cent.; reserves increased to 27,000 marks.

*Biedenkopf.*—People's Bank. Net profits, 1,292 marks; dividend, 8 per cent.; members, 149.

*Neunberg.*—Trade Bank. Net profits, 4,780 marks; dividend, 6 per cent.

*Central Franconia.*—Farmers' Credit Association. Dividend, 5 per cent., and 11,000 marks applied to the reserves. Amount of shares, 730,536 marks.

*Weirnsheim.*—Co-operative Saving and Loan Association. Total exchanges, 700,000 marks; net profit, 3,735 marks; dividend, 8 per cent.; amount applied to reserves, 2,000 marks; paid-up capital, 23,850 marks.

*Mergentheim.*—Co-operative Loan and Savings Association. Cash transactions, 2,000,000 marks; net profit, 9,716 marks; dividend, 7 per

cent.; applied to reserve fund, 1,600 marks; capital, 144,057 marks; members, 385.

*Essen*.—Insurance Bank. Receipts for premiums and dues, 1,435,583 marks, a considerable increase; dividend, 60 marks per share.

*Nordhausen*.—Bank of Moritz Heinrich & Co. Transactions, 25,000,000 marks; profit about 10 per cent.

*Kiel*.—Vereins Bank. Net profit, 97,927 marks; dividend, 75,000 marks, or 12½ per cent.

*Dresden*.—Dry Lees and Corn Spirits Factory. Dividend to shareholders, 12 per cent.

#### MISCELLANEOUS.

*Leipzig*.—Street Railway Company. Dividend, 3 per cent.

*Cologne*.—Fire Insurance Company. December 31, 1878, total of insurances amounted to 3,247,742,518 marks, and the capital reserves to 3,696,617 marks. Reserves for contingencies, 3,216,000 marks; dividend, 330 marks per share.

*Nordhausen*.—Erfurt Railway. Dividend about 4½ per cent. on preferred stock.

ALFRED E. LEE,  
*Consul-General.*

## UNION IRON SOCIETIES OF GERMANY.

Comparative statement, prepared by *Consul-General Lee*, of operations of the *Union Co-operative Loan Societies of the German Empire from 1859 to 1878, inclusive.*

Year.	Societies enumerated in the second column have reported their balances to the anwalt of the union.									
	Advances and prolongations.			Funds owned.			Deposits and credits.			
	Number of societies that have reported their balances.	Total.	Average per so. cley.	a. Shares of members.	b. Reserves.	Total of a and b.	Average per so. cley.	a. Loans from private persons.	b. Credits from banks and societies.	c. Savings deposits.
Funds owned.										
Deposits and credits.										
Total from a to c.										
Average per cent. of funds owned to other.										
Pr. ct.										
Thalers.										
Mark.										
1859	80	4,131,436	51,642	246,001	30,845	276,846	8,480	501,795	795,383	513,350
1860	133	8,478,489	63,748	482,012	66,845	548,857	3,976	1,069,833	1,322,494	1,322,494
1861	184	18,878,099	89,766	794,375	107,238	907,213	4,825	1,983,441	2,649,086	2,649,086
1862	243	23,917,281	97,425	1,190,545	132,893	1,322,438	5,483	3,441,033	2,747,577	2,747,577
1863	339	33,917,948	100,053	1,803,293	218,947	2,022,250	5,982	5,641,829	3,416,290	3,416,290
1864	435	48,147,495	100,818	2,959,298	298,461	3,257,757	7,146	7,401,317	5,355,265	5,355,265
1865	498	67,589,903	135,682	4,442,879	498,679	4,941,558	9,744	11,154,579	6,592,197	6,592,197
1866	539	85,010,145	159,793	5,773,108	558,398	6,331,506	11,887	10,646,394	8,726,518	8,726,518
1867	570	102,024,152	178,983	6,947,031	660,954	7,607,985	13,170	12,395,980	10,778,709	10,778,709
1868	666	136,247,793	208,080	9,865,592	986,954	10,852,546	15,362	16,398,078	1,178,387	1,178,387
1869	735	204,772,189	280,545	12,078,444	1,173,138	13,251,582	18,902	19,658,859	1,998,961	1,998,961
1870	749	297,818,287	391,583	15,540,192	1,416,175	16,956,367	21,915	24,798,679	2,990,040	2,990,040
1871	797	346,326,390	430,305	18,516,787	1,540,689	19,057,476	23,925	32,027,943	3,493,432	3,493,432
1872	807	379,742,015	459,481	20,516,531	1,781,762	22,298,293	26,485	41,747,927	4,953,432	4,953,432
1873	834	444,723,015	535,481	24,941,591	2,281,294	27,222,885	30,613	54,145,748	6,886,272	6,886,272
1874	815	451,008,394	554,488	25,711,589	2,470,793	28,182,382	30,613	64,688,384	8,686,272	8,686,272
1875	815	498,549,479	611,717	27,847,386	2,869,227	30,716,613	37,616	64,688,384	4,696,706	4,696,706
1876	806	1,225,589,219	1,882,842	88,876,139	10,015,027	98,891,166	122,064	198,349,234	14,160,425	121,982,922
1877	929	1,500,402,483	1,666,884	98,685,583	12,066,410	110,751,993	119,161	208,285,592	17,141,669	124,561,862
1878	948	1,456,066,733	1,535,869	102,882,342	13,853,027	116,735,369	125,158	208,041,742	17,046,473	121,065,186

To show the progress between the years 1859 and 1878 the sums for these two years are reduced to United States dollars:

Year.	Number of societies that have reported their balances.	Total.	Average per so. cley.	a. Shares of members.	b. Reserves.	Total of a and b.	Average per so. cley.	a. Loans from private persons.	b. Credits from banks and societies.	c. Savings deposits.
1859	80	\$2,940,845	\$38,872	\$175,645	\$22,023	\$197,668	\$2,470	\$358,281	\$4,176,857	\$385,818
1878	948	\$46,528,888	\$48,587	\$24,486,967	\$3,297,080	\$27,784,048	\$28,367	\$49,513,985	\$17,046,473	\$28,796,237

One thaler = 3 marks; one mark = 23.8 cents.



## UNION CONSUME SOCIETIES OF GERMANY.

Comparative statement, prepared by Consul-General Lee, of operations of the Union Co-operative Consume Societies of the German Empire, from 1864 to 1878, inclusive.

Year.	Number of societies that have reported their balances.	Societies that have reported their balances to the union annual, i. e., those enumerated in the second column.						
		Number of members.	Proceeds of sales during the year.	Reserves.	Loans received.	Debts for merchandise bought on credit.	Amount.	Number of societies giving credit.
		Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.	Thalers.
1864	38	7,709	287,589	21,433	4,912	16,951	12,636	5,750
1865	34	6,647	308,491	22,226	2,707	16,529	18,948	5,225
1866	46	14,083	826,598	46,982	6,058	51,062	29,394	9,275
1867	49	18,884	967,974	72,186	11,160	72,070	44,060	10,897
1868	75	33,656	2,124,141	156,244	25,179	125,717	68,272	11,425
1869	109	42,266	2,375,417	208,717	40,857	115,342	80,295	14,106
1870	111	45,761	3,002,620	272,835	50,408	182,136	135,760	30,267
1871	143	61,517	4,507,658	529,857	73,842	268,976	209,658	32,444
1872	170	72,622	5,219,849	558,377	86,135	119,751	248,180	23,186
1873	189	87,504	7,264,136	804,709	117,688	338,593	308,391	23,425
1874	178	90,088	7,530,831	898,497	142,611	723,547	268,007	26,802
1875	179	98,055	22,704,864	593,409	2,429,585	875,544	124,419	124,419
1876	180	101,727	24,276,410	554,308	2,472,415	1,004,168	143,722	143,722
1877	202	99,862	23,503,379	671,519	2,594,148	890,163	158,113	158,113
1878	202	109,515	23,601,834	2,927,619	2,810,083	785,394	164,703	164,703

To show the progress between the years 1864 and 1878, the sums for these two years are reduced to United States dollars:

Year.	Number of societies that have reported their balances.	Number of members.	Proceeds of sales during the year.	Reserves.	Loans received.	Debts for merchandise bought on credit.	Debt of members for credit granted.
1864	38	7,709	\$191,059	\$2,507	\$12,103	\$8,022	\$4,106
1878	202	109,515	6,807,260	202,941	668,800	186,924	39,190

## PRODUCTION OF STARCH SUGAR.

*Statement prepared by Consul-General Lee of the production of starch sugar within the German Zollgebiet during the fiscal year 1878-79.*

Districts.*	Numbers of factories.	Quantity of starch consumed.				Amount of sugar produced.				Average selling price per centner.		
		Home manufac- tured.		Purchased.		Solid.	Sirups.	Colored.	Solid.	Sirup.	Colored.	
		Wet.	Dry.	Wet.	Dry.							
Prussia:		<i>Centners.</i>	<i>Centners.</i>	<i>Centners.</i>	<i>Centners.</i>	<i>Centners.</i>	<i>Centners.</i>	<i>Centners.</i>	<i>Reichsmark.</i>	<i>Reichsmark.</i>	<i>Reichsmark.</i>	
Brandenburg .....	19 (including 2 inactive) ..	299,963	27,600	520,259	.....	192,230	273,610	12,730	15.7	15.1	18.0	
Pommern .....	4 (including 1 inactive) ..	4,660	.....	4,785	.....	5,090	1,030	.....	12.5	13.9	.....	
Posen .....	1 .....	4,007	.....	.....	.....	.....	2,404	.....	.....	12.0	.....	
Silesia .....	4 .....	10,300	.....	3,000	400	2,360	5,780	170	13.7	14.9	21.0	
Saxony .....	6 (including 2 inactive) ..	31,159	1,600	13,120	2,925	.....	24,807	5,300	14.0	14.8	18.2	
Rhine Province .....	2 .....	12,000	.....	.....	.....	8,000	.....	.....	17.5	.....	.....	
Total for Prussia .....	36 (including 5 inactive) ..	362,080	29,200	541,114	3,325	207,720	307,631	18,200	15.7	15.0	18.1	
Bavaria† .....	1 .....	.....	.....	.....	.....	750	.....	.....	15.0	.....	.....	
Baden .....	1 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Hesse .....	4 (including 3 inactive) ..	2,850	1,100	420	.....	2,809	3,550	.....	17.0	12.9	.....	
Mecklenburg .....	2 .....	5,300	.....	800	.....	.....	2,200	.....	.....	12.5	.....	
Brunswick .....	1 .....	4,500	.....	.....	.....	.....	10,239	50	17.1	20.4	30.0	
Alsace-Lorraine .....	2 .....	.....	.....	42,921	6,244	23,686	.....	.....	.....	.....	.....	
Total in the year 1878-79 ..	47 (including 8 inactive) ..	374,930	30,300	585,255	8,569	234,756	323,620	18,250	15.8	15.2	18.1	
Total in the year 1877-78 ..	48 (including 3 inactive) ..	287,100	25,210	494,496	28,118	162,693	318,617	24,615	16.8	16.3	19.0	
Increase (+) .....	-1 .....	+87,830	+5,090	+90,759	-18,549	+72,063	+5,003	-6,365	-1.0	-1.1	-0.9	
Decrease (-) .....	(+5 inactive) .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

\* In the Prussian states not mentioned, and also in Luxemburg, no production took place.

† No information could be obtained concerning the quantity of starch consumed.

‡ The managers of this factory refused to give the result of their operations.

Statement prepared by Consul-General Lee, showing the retail prices of produce in the market of Frankfort-on-the-Main, November 1, 1879.

[1 kilogram = 2.2 pounds.]

Articles.	Amount.	Price.
Pease, whole .....	Per 100 kilograms.	\$6 66 to \$7 63
Pease, hulled .....	do	7 14 to 8 57
Beans, white .....	do	5 71 to 6 66
Lentils .....	do	8 09 to 11 90
Potatoes .....	do	1 55 to 1 67
Rye flour .....	do	5 83 to 6 90
Rye groats .....	do	5 47 to 5 83
Wheat flour .....	do	5 47 to 10 95
Richt straw .....	do	1 24 to 1 43
Hay .....	do	1 24 to 1 76
Beef:		
Ochsenfleisch .....	Half kilogram	15 to 16½
Rindfleisch .....	do	11½
Kuhfleisch .....	do	11½ to 14
Veal .....	do	11½ to 13
Mutton .....	do	11½ to 15
Pork .....	do	14 to 16½
Bacon, smoked .....	do	14 to 23½
Beef-tallow:		
Crude .....	do	11½ to 14
Rendered .....	do	11½ to 16½
Lard:		
Crude .....	do	16½
Rendered .....	do	10 to 14
Ham, by retail .....	Per kilogram	83
Ham, collar .....	do	76
Foreign dried meat .....	do	28½
Brain sausage .....	do	71 to 76
Sward sausage .....	do	38
Bologna sausage .....	do	47½
Eel, smoked .....	Each	04½ to 30½
Herrings .....	Per 100	1 67
Herring .....	Each	01½ to 02
Red herring .....	do	02
Eggs .....	Per 100	1 52 to 1 95
Butter .....	Per 50 kilograms	19 04
Do .....	Per kilogram	38 to 54½
Wine vinegar .....	Per liter	04½ to 06½
Brandy .....	do	09½ to 17
Milk .....	do	04½ to 05½
Petroleum .....	do	05 to 05½
Rape-seed oil .....	do	17
Rye bread .....	Per 2 kilograms	11½
Rye bread, mixed .....	Per 3 kilograms	20
Black bread .....	Per 1 kilogram	05
White cabbage .....	Per 100	11½ to 16½
Caniflower .....	Each	07 to 08½
Crisped cabbage .....	do	01½ to 02
Turnip cabbage .....	do	00½ to 01½
Red cabbage .....	do	02 to 04½
Carrots .....	Per bunch	01 to 02½
Turnips .....	do	00½ to 00½
Cucumbers .....	Per 100	85 to 2 38
Do .....	Each	01 to 02
Onions .....	Per 50 kilograms	1 55 to 1 67
Do .....	Per 25 bunches	23½ to 29½
Garlic .....	Per 100	47½
Horseradish .....	do	3 33
Do .....	Each	03½ to 04½
Celery .....	do	02 to 02½
Apples .....	Per 100	23½ to 1 07
Pears .....	do	19 to 1 43
Red grapes .....	Per pound	04½
White grapes .....	do	04½
Peaches .....	Per 100	1 19 to 1 90
Do .....	Each	01½ to 02½
Prunes .....	Per 50 kilograms	2 85
Do .....	Per 100	07 to 09½
Cranberries .....	Per 50 kilograms	4 76
Nuts .....	Per 100	04½ to 08½
Melons .....	Each	11½ to 35½
Figs .....	do	02½ to 04½
Paradise apples .....	Per pound	09½ to 14½
Artichokes .....	Each	09½ to 16½
Citrons .....	Per 100	2 88
Oranges .....	do	5 95

*Statement prepared by Consul-General Lee, showing the retail prices &c.—Continued.*

[1 kilogram=2.2 pounds.]

Articles.	Amount.	Price.
Chickens:		
Female, live .....	Each .....	\$0 21 to 0 31
Female, dressed .....	do .....	23½ to 35½
Male, live .....	do .....	14 to 31
Male, dressed .....	do .....	16½ to 31
Ducks:		
Live .....	do .....	33 to 38
Dressed .....	do .....	35½ to 54½
Geese:		
Live .....	do .....	71 to 1 19
Dressed .....	do .....	1 19 to 2 38
Pigeons:		
Live .....	do .....	08½ to 09½
Dressed .....	do .....	09½ to 12
Partridges .....	do .....	35½ to 52
Hares .....	do .....	83 to 96
Fieldfares .....	Per 8 .....	47½
Maroon chestnuts .....	Per 50 kilograms ..	6 64
Chestnuts .....	Per half kilogram ..	04½ to 05½
Do .....	Per 50 kilograms ..	4 28 to 4 76
Fruit for pressing .....	Per 100 kilograms ..	1 26 to 1 43
Deer .....	Per half kilogram ..	21
Swiss cheese .....	do .....	19
Emmenthal cheese .....	do .....	21½
Cream cheese .....	do .....	10½ to 11½
Limburg cheese .....	do .....	09½
Cheese, hand made .....	do .....	10½ to 11½
Whey cheese .....	do .....	04½
Honey .....	do .....	14 to 23½

*Grain quotations of the Frankfort Produce Exchange, November 1, 1879.*

Articles.	Amount.	Price.
Wheat:		
Frankfort and Wetteren .....	Per 100 kilograms ..	\$5 59 to \$5 83
Foreign .....	do .....	5 71 to 5 83
Rye:		
Frankfort .....	do .....	4 28
Foreign .....	do .....	4 01 to 4 76
Barley:		
Frankfort and Wetteren .....	do .....	4 40 to 4 64
Foreign .....	do .....	4 52 to 4 76
Oats:		
Frankfort .....	do .....	3 45 to 3 57
Foreign .....	do .....	3 45 to 3 81
Rapo-seed oil:		
Frankfort .....	Per 50 kilograms ..	7 14
Brandy .....	Per 100 liter 50 per cent. Trall.	11 90

### AIX-LA-CHAPELLE.

*Report, by Commercial Agent Du Bois, on the commerce and industry of Aix-la-Chapelle for the year ending September 30, 1879.*

Perhaps no crisis in the history of Prussia since the desolating wars of the First Napoleon has been so depressing and disastrous to German enterprise and industry as the one through which the empire has been passing for the past four years.

The expectations respecting the improvement in manufacturing industries, which brightened the hopes of the artisan and relieved the anxiety of the capitalist last year, have not been realized. General stagnation commands nearly all the branches of trade, and the army of idlers and

number of silent factories are increasing, capital is disputed, confidence is weak, and the soul of enterprise, for the time being, seems dead. This depression is so universal throughout the empire, and the working masses are so distressed, that the subject of relief constantly forces itself upon society and the press. Many plans are concocted and many plausible suggestions are made respecting this most important matter. But all plans suggested can have no weight, so long as the furnaces are cold, the engines still, and the mills silent. Work for the masses and a market for the products of their labor can alone bring relief to the thousands who are now gravely suffering in all the manufacturing and commercial centers of this densely populated land.

For the past five years capital invested in manufacturing enterprises has found no remuneration; on the contrary, it has found the principal slowly consumed by productions which were unable to secure a paying market. This fact has disturbed and weakened the confidence in manufacturing enterprises, and great sums have been withdrawn and withheld from industrial investments in Germany. As a result this capital, failing to find reward at home, could not remain idle, and, therefore, has sought activity abroad. Millions upon millions have gone across the seas and entered in the fields of North and South American enterprise.

#### THE WOOLEN INDUSTRY OF AIX-LA-CHAPELLE.

The district of Aix-la-Chapelle contains more woollen factories than any other consular district on the continent of Europe, and this industry supplies the markets of the United States with more cloth than all the districts of Prussia combined.

Within the past thirty years the German cloth manufacturer has reaped a rich and abundant harvest in the markets of the United States. Between the years 1856 and 1866 the demand for German cloths in the United States was immense, and the great factories of this district were operating night and day supplying the demand at paying prices. Fortunes were made in a few years by this large trade, and capital, finding ample remuneration, sought investment in the cloth industry, and soon the number of factories were doubled, and the producing capacity of most of them was greatly increased by the adoption of new and improved machinery. For a quarter of a century the industry prospered and men grew rich. But in this, as in all other cases of over production and want of market, there came a reaction. The factories here, having made nothing but black cloth, and having made immense quantities of that, soon flooded their own markets.

At this time there came also a change in the public taste respecting the wearing of black cloth; England, finding that at last the German prejudice against wearing the lighter patterns was breaking away, commenced to build up an immense trade in the fancy cloth wares, which her factories were producing in great abundance. For years nothing but the black stuffs were worn by the Prussians, but as soon as the markets became stocked with the English patterns, which were sold at reasonable prices, it became fashionable to wear them, which result was a terrible shock to the German industry. At this time the woollen industry received a new impetus in the United States, owing to the influence of the civil war, and the increase of the protective tariff; and in this condition of affairs, our woollen factories were able to compete with the German production. Within seven years the market for German cloths in the United States, from which the German factories had for thirty years reaped untold wealth, was paralyzed to such an extent that in my

consular district alone the export trade was diminished at least 80 per cent.; thus in the year 1873 commenced the hard times with the woolen industry of Germany which has increased up to the present time.

In my last report on the condition of the manufacturing interests of this district, dated July 30, 1878, I stated the fact that the future looked brighter and hope was entertained by many that the cloth industry would greatly revive during the year 1879. Time has destroyed the prediction and dimmed the hope. Instead of realizing an improvement nothing but a serious retrogression has been experienced. Five cloth factories, which six years ago were prosperous, closed their doors during the past year and are now rusting in silence, and unless something occurs to check this distressed condition others may be compelled to cease work entirely, or diminish their force and wages and time of labor.

While this great depression is universal I am able to record a slight improvement in the export of woolen goods to the United States during the quarter ending September 30, 1879, as compared to the quarter ending September 30, 1878. During the latter quarter \$156,418.21 worth were sent to the United States from the consular district of Aix-la-Chapelle, while during the former quarter \$193,223.95 were exported into our country, making an increase of \$36,805.75. This increase has arisen undoubtedly from the destructive fire which occurred in New York last spring in which several thousand pieces of woolen goods were destroyed, the most of which came from the factories of my consular district; thus a demand was created which was in a large measure supplied from this point.

This demand having been a temporary one, the development of the woolen industries in the United States having of late received a strong impetus from the revival of trade, the establishment of the protective tariff in Canada and Italy having in a great measure barred the German goods out of those respective markets, there is little or nothing to hope for in the immediate future of the German woolen industry, so far as the export trade is concerned.

This fact being realized the protective system has come to the rescue in hopes of saving the manufacturing interests from irrevocable injury, but with what effect remains yet to be seen.

The importation of wool from America has diminished a little, and the price has fallen from 5 to 6 per cent. In September, 1878, the breaking away of the English credit crisis interposed the first obstacle to a strong wool price retrogression, which was so nearly checked at the close of the great London wool auction that at the opening of the year 1879 the market was once more in a firm condition.

The price of German wool has altered but a little since my last report. There is, however, one exception, which occurred in the Breslau market, where the finest Sicilian cloth-wool suddenly increased in value from 15 to 20 marks per centner.

While in my consular district during the past year not so many spinners have been compelled to diminish their activity as during the year preceding, still the capital invested has not been remunerative.

In *knitting yarns* there has been no positive improvement, and under prevailing circumstances improvement seems quite impossible. Belgium, the enterprising and progressive neighbor of the German Empire, has flooded the German market with excellent yarns.

The little kingdom has been able to do this from the fact that her credit system is much more favorable to manufacturing enterprise than is that of Germany, and the Belgium factories are allowed to employ children, which privilege is denied to the German manufacturer in a

great measure. With these disadvantages and a virtual free-trade system, foreign yarns were thrown upon the German markets in such immense quantities and at such cheap prices that it was quite impossible for the German industry to compete with its neighbors in its home markets. It is claimed by many that had not the government decided to protect this industry by the new tariff law, it would have gone to the ground.

*Wool-carding.*—There are forty wool-carding establishments in Germany, and of this number twenty are located within my consular jurisdiction. These factories, by the superiority of their work, have been able to withstand foreign competition to a great extent.

*The stone coal industry* has improved a little since my last year's commercial report. In order to create a demand by which an oversupply could be disposed of, the price was lowered, and the desired result was realized, in a great measure, but in order to continue the low prices the cost of production has been diminished, which was accomplished by reducing the price of labor. The prosperity of the mines depends greatly upon the iron industry, and as but little improvement has been felt in this respect, the outlook is not inspiring, either to the employés or the employers.

Of the fourteen coal mines which exist in the neighborhood of Aix-la-Chapelle, nine of them produce what is called the "meager" coal, and five "fat" coal. Last year the combined production of these mines was 17,986,596 centners, worth 5,055,762 reichmarks, which was an increase in quantity of 2,377,947 centners, and 510,598 reichmarks in value over the preceding year.

The workmen engaged in these mines during last year numbered 4,973, which is an increase of 312 over the number employed during the preceding year, and the number employed and sustained by the mining industry amounted to 17,089, which was about 800 more than in the preceding year. Of the productions of the mines, about 6,500,000 centners were exported to Holland and Belgium, and also 1,000,000 centners of coke, which, altogether, was an increase of about 2,000,000 over the exports of the year preceding.

*A chance for American coal.*—From foreign lands were imported into this district about 10,000 tons, and I would suggest here, in answer to a number of letters received on the subject, that should our coal producers desire to furnish this 10,000 tons to this district, they certainly will have the advantage of very cheap transportation, and of being able to deliver much better coal than that which is imported at present. As I have taken some pains to investigate the matter, I might further suggest that Northeastern Germany, especially the region of Königsberg, and Northwestern Russia, with Riga as the port of entry, offer an inviting field for our coal exporters. At present nearly all the coal consumed in those regions comes from England, Cardiff being the chief point of exportation. The cost of coal is about 12s. on board the transport ships, and the freight is about 7s. per ton, and the jobbing margin about 1s., making a total cost at the delivery to the consumer in Riga and Königsberg of 19s. About 200,000 tons are consumed in the region around about Riga, and quite as much in the district of Königsberg. Here is a great field for our energetic coal producers, and those who are acquainted with the condition of the coal markets in these regions claim that, with energetic management, American coal can command the trade.

The *lead, zinc, and silver* industry of this consular district employs 4,310 workmen. Of these, the majority are employed in the stock company called "The Zinc and Lead Manufacturing Company of Stalberg and

Westphalia." The production of lead last year amounted to 15,958 tons; silver, 20,482 kilograms; raw zinc, 122,396 tons.

Owing to the universal increase in the production of the above-mentioned metals, the value of both lead and zinc has made a significant fall, as is shown in the following: In 1877, the selling price of lead was 19 marks per centum, and in the beginning of the year 1879 it had sunk in value to 13 marks 75 pfennigs per centum.

The lead industry at present finds itself in a most trying crisis, and at present there are no indications that the end of the crisis is approaching. The falling off in the value and sale of lead has arisen from the fact that in recent years America has made herself perfectly independent of the foreign lead production, and not only independent, but it is claimed here by many that she will soon be furnishing the European markets with abundance of this useful metal, which will be of a better quality and cheaper in price than that now secured from the continental mines. This prophecy, however, will hardly be realized, at least for some time to come, because at present there is an overproduction of lead in Europe which is selling at a ruinously cheap price. Germany and Spain are rich in inexhaustible lead mines, and the overproduction of these mines has so flooded the markets and depressed the price that at present but little, if anything, is made over the cost of production.

These two countries will produce two-thirds of all the lead produced in Europe, and it is not possible for Europe to absorb this year the overproduction of last year and the production of this.

The exportation of raw lead from Germany to Belgium and Holland during 1878 was 467,086 centners, which was an increase of 136,585 centners over the exportation of 1877. The importation of lead during 1878 was only 35,684 centners. The selling price of zinc in 1877 was 21 marks, and at the beginning of 1879, 16½ marks. This shrinkage in valuation arose from the development of the zinc industries in the United States. This development, however, is not so significant for the foreign zinc industry as for the lead, as the consumption of the former is not proportionately so great in the States as the latter. However, the falling off in the export trade to America has been quite sensibly felt. The indications now are that the zinc production in Rhineland, Westphalia, and Belgium for the present year will not be so large as it was in 1878. The amount exported from here to Belgium and Holland during the past year was 124,544 centners, which was an increase of 35,140 centners from the amount exported in 1877. The amount imported was 14,759 centners, which was an increase of 2,071 centners over the amount exported in 1877.

*The chemical factories* of this consular district produced last year about 1,000,000 kilograms of sulphuric acid, 3,808,604 kilograms of calc soda, 458,713 kilograms sulphur, and 8,487 kilograms of calc.

The productions and sales of the works have increased somewhat within the last year, which was owing to the restriction and diminution in other chemical factories throughout the empire. The industry was, however, unremunerative, from the fact that prices fell in order to compete with the soda which England and France are importing into Germany. Four hundred and fifty men are employed in the industry in this consular district; 20,680 centners of sulphur, 3,780 calc soda, and 6,239 centners of sulphuric acid were imported into this district during last year.

*Of the soap industry* but little can be said of a favorable nature. The prices have been very much depressed. There are, however, some indications of improvement noted during the past three months. The ex-



portation of soap to Belgium and Holland amounted to 4,182 centners. The following raw material was imported from Holland, England, and Belgium: 15,822 centners of tallow, 15,780 linseed oil, 1,017 palm oil, and 117 centners of cocoanut oil. This was nearly 40 per cent. decrease in the importations of 1877.

*Colonials.*—The past year was unfavorable for the colonial *ware* trade. All prices have fallen owing to the immense stores on hand and the lessened consumption capacity. At the beginning of the year 1879 good Java coffee opened at 54 cents, but in a short time closed at 40 cents. Petroleum fell quite 25 per cent. from the fact that the tariff on these articles has been considerably increased. It is believed that the system of smuggling, once so notorious between Belgium, Holland, and Germany, will be revived, and consequently the legitimate business of this district (which has such an extended border) will suffer in a great measure. Timely precaution, however, has been taken to suppress the smuggling traffic.

The following figures show the amount of colonial wares imported into my district during last year: Raw coffee, 27,322 centners; rice, 12,401 centners; refined sugar, 1,506 centners; olive oil, 336 centners; rape-seed oil, 29,132 centners; linseed oil, 15,780 centners; dried fruit, 4,205 centners; herrings, 3,589 tons; petroleum, 930,685 centners, which was 55,839 centners more than was imported during the preceding year.

*Cigars.*—Of the cigar fabrication nothing favorable can be reported. This business has suffered in common with all the other manufacturing industries, and it is generally believed that it will suffer still more from the influence of the new tariff, as it is claimed that the tax will greatly reduce the consumption, and the government, instead of realizing a good increase from the tax of 58 marks which has been imposed upon tobacco, will really, in the end, be the loser, besides injuring the home industry to a great extent.

The following is the amount of tobacco imported into this district during the year 1878: Raw tobacco, 17,219 centners; cigars, 96 centners. Exports to Holland and Belgium: Raw tobacco, 3,931 centners, and cigars, 437 centners.

*The iron industry*, which has been languishing under a stagnation of 5 years, is stagnant still, owing to meager demand and the energetic competition of Belgium. There are at present in my consular district fourteen iron foundries; five of these employ only sixty men, who do but little more than keep the machinery from rusting, and the other nine are working but half their force, and these are employed on short time. The furnaces are using Scotch and English raw iron with some old cast iron. The machine and building pieces have a selling price of from 150 to 200 marks per 1,000 kilograms. The wages of the workmen are from 50 to 60 cents per diem, for which paltry sum they are required to work from ten to twelve hours a day.

*Steam-boilers.*—In the steam-boiler industry there is no change from the unsatisfactory condition of last year. While there was an increased demand for boilers last year, there was also a decrease in the price, and to such an extent that little or no profit was realized.

*Machinery.*—The manufacture of machines has experienced a further depression from that recorded last year. It has been and is difficult to find employment for the few workmen who are still retained in the shops. The working hours have been diminished, and the day and piece prices have been reduced about 20 per cent. The industry has been unexpectedly prostrated, from the fact that foreign countries, especially the United States, knowing that the tariff would be increased

here, flooded the markets of Germany. The official papers are constantly announcing the liquidation and bankruptcy of the machine factories throughout the kingdom. It is believed, however, that the tariff will relieve in a measure the wide extended and terrible distress.

**Needles.**—In the needle industry I am able to record an improvement within the past two months; but up to the 1st of July the manufacturers of needles experienced a great depression in the trade. Foreign competition had compelled them to reduce working hours, price of wages, and number of workmen. The United States exported immense quantities of machines and needles to Germany, paying only about 5 cents per 1,000 tariff for the needles, while the tariff in the United States was about 30 cents per 1,000. Under the influence of the new tariff, however, the industry seems to have revived, as most of the factories of my district are working on full time at present.

**Leather.**—The fur and tanned skin business was unremunerative during the year 1878. Owing to the hard times the cheapest furs were worn. The muffs and trimmings have been mostly cheap and unsubstantial. Dark-colored hares and rabbits were used the most, while the sable and marten were quite neglected.

Fresh ox hides for belting have been selling at depressed prices. The demand, however, for cow-hides for upper leather has increased, and skins used as sole-leather found fair sale. Goat-skins also found good demand. Calf-skins are still depressed in value. Kid held a fair price throughout the year, and while the kid-glove fabrication has been somewhat extended during the past year, the goods produced have been of a cheaper quality than those produced during the preceding year. There has been an increase in the export of kid to the United States.

**Building materials.**—Last year, notwithstanding the depressed times, private building received a new impetus; 197 buildings were erected, against 113 erected the year before, and 6 manufacturing establishments, against 4 in 1877. The price of building material is as follows: Bricks in the oven, per 1,000, 11 to 14 marks; hard-burned bricks at the place of building, 16.50 marks to 20 marks; fir-tree wood per cubic meter, 32 to 42 marks; Portland cement, per ton, 9 to 12 marks; slaking sand, per cubic meter, 4 marks; worked blue-stone, 90 to 150 marks per cubic meter. The workmen receive from 40 to 60 cents per diem. Masons and carpenters from 60 to 90 cents per diem.

#### EXPORTS TO THE UNITED STATES.

The following are the declared exports to the United States from my consular district during the past year:

	Marks.
Woolen cloth.....	2, 625, 930
Woolen gloves.....	10, 396
Kid gloves.....	455, 689
Pins and needles.....	66, 719
Lead.....	7, 770
Zinc.....	5, 999
Glassware.....	202, 137

This was a decrease on the exports of 295,718 marks from preceding year.

#### AMERICA THE LAND OF PROMISE.

The time has now arrived when an American residing in Europe can be especially proud. Go where one may, into the walks of business life, into the society of the crowded cities, or even among the quiet villages

of the continent and he will hear more said about the United States than of any other country on the earth. The farmer, oppressed by heavy taxation and restricted to a small and not very productive tract of land, speaks with endless enthusiasm of the broad and luxuriant fields of Texas, Minnesota, and the great West, where there are still homes enough for the multitudes of Europe, and bread for the millions who are now involuntarily idle and hopelessly waiting for work. The artisan, working on half-time and for greatly reduced wages, reads with intense interest the tempting news which comes constantly from across the Atlantic respecting the splendid prosperity which is now blessing our manufacturing industries throughout the Union. The manufacturer, compelled to reduce wages, force, and time of labor owing to a want of demand for his productions, and the profitless price received for that which finds a market, hears with envy and chagrin the busy hum of industry that comes from over the sea. The merchant, drained by constantly increasing taxes and discouraged by the commercial stagnation which is oppressing business circles everywhere on the continent, listens with impatience to the marvelous stories told of the immense increase of the exchange in New York, and of the flood tide of mercantile orders which is flowing steadily into that great metropolis. The stock speculator, finding his investments growing "gradually worse by degrees," and seeing no prospect for improvement in the immediate future, reads with a restless and yearning spirit of the wonders of our inexhaustible mines and the prosperous condition of our stocks in general. And the capitalists, finding no remuneration for money invested in manufacturing and agricultural industries on the continent, are turning anxious and hopeful eyes toward our land of promise. With this condition of affairs, it is not to be wondered that the name of the "United States of America" has become a talisman to the multitudes of Europe, who are looking for relief from the grave and distressing circumstances with which they are unfortunately surrounded.

JAMES T. DU BOIS.

UNITED STATES COMMERCIAL AGENCY,  
*Aix la Chapelle, October 31, 1879.*

---

#### BARMEN.

*Report, by Consul Stanton, on the trade and commerce of the consular district of Barmen, for the year ending September 30, 1879.*

#### GENERAL REVIEW OF TRADE.

The following detailed reports, though relating to but a small portion of the manufacturing industries of this district, and especially to those most intimately connected with the United States, may nevertheless be fairly taken as a standard of measurement for the past year's business in all branches of trade.

This, one of Germany's most populous provinces, is almost exclusively engaged in mining and manufacturing industries. Millions of dollars are invested in mines and factories, and thousands of skilled laborers trained through a long series of years, are dependent on local textile industries.

Since 1873 a universal depression, growing more intense with the passing years, has weighed on all branches. Raw materials, which, excepting iron and coal, are almost entirely obtained abroad, have either con-

stantly fallen in price or been subject to fluctuations which completely deranged the ordinary course of business.

The normal production of the manufacturing industries of this district is twice or thrice what Germany can consume, and export has consequently been for years past the main stay of manufacturers, local products finding their way to all quarters of the globe. Latterly, however, as under the increasing inclination of neighboring countries to levy protective duties market after market has slipped away, production was obliged to be greatly restricted, but the imperative necessity of retaining their skilled laborers and preserving their factories from ruin and decay compels a certain limited production, which is still too large for home consumption, and in connection with the surplus stocks which France, Belgium, England, and America throw on the open, or scarcely protected, German market, renders business both difficult and unprofitable.

Hitherto the wonderful reactive power of the United States has always helped Europe out of her commercial difficulties, but the long prevalence of the business crisis in America has taken away this last resource, and the German manufacturer now vainly and anxiously scans the world's commercial horizon in search of some remunerative market for his wares.

The annexation of Alsace and Lorraine has also been a thorn in the German merchant's side, since the manufacturers of those provinces are now become competitors in the overcrowded German market, whilst affording by way of compensation no market for German wares.

Under such conditions the position of the German manufacturer has been difficult in the extreme, and the small number, comparatively, of failures during the last few years is an evidence of the general soundness of business principles in Germany, and a just source of pride.

In almost all branches exporting to the United States the exports during the last few years have either stood still or decreased. In braids and bindings the leading Barmen branch, exports have decreased about 70 per cent. since 1876, while the only branches which, in spite of high duties, increasing American competition, and poor demand, have decidedly increased are the dress-goods and hat-band branches, whose exports since 1876 have respectively increased 40 and 50 per cent. This increase I take to be another evidence of the bad times prevalent in this district, since the business branches making this exhibit have been almost exclusively consigning during the last few years, and a consignment business is one which few, if any, firms do by preference.

The condition of the principal branches engaged in trade with the United States is detailed below:

#### AMMUNITION, CAPS, AND CARTRIDGES.

Owing to an increased activity in transatlantic markets, the production of caps and cartridges surpassed that of the preceding year. Prices, however, were lower, and, since the trade is mainly dependent on foreign demands, the proposed tax on manufacturing materials, in combination with an ever-increasing foreign competition, renders the future prospects of this branch uncertain and discouraging. Sporting powder, owing to its excellent quality, enjoyed a good home demand, whilst blasting powder, by reason of the stagnation in the mining trade, and excessive competition, realized unremunerative prices. For the last four years the exports to the United States were as follows:

Year ending September 30, 1876.....	\$5,015.65
1877.....	1,971.24
1878.....	4,452.48
1879.....	28,342.43

## ARTICLES OF ART.

In Dusseldorf, the art center of the Rhenish provinces, the blighting touch of hard times has been most keenly felt these last few years, but reviving trade in the United States is already exercising a beneficial influence in art circles.

The destruction of the palace of the electors of Brandenburg in 1872, by fire, left art students without a fitting habitation—the palace, to that date, having served as an academy of art—and seriously injured the city as an art school; while dissensions among the artists, together with the clashing interests of picture dealers, hastened the decline of art in Dusseldorf.

Now, however, all these obstacles to prosperity have been swept away, or are in course of removal, and the new academy, a large and elegant structure for the gratuitous instruction of about three hundred students (which will be opened this autumn), in connection with the art museum, now in course of erection, a most healthy climate, and moderate living expenses, will not only greatly stimulate the fine arts but enable Dusseldorf to attain the leading position as a German school of art.

Exclusive of pictures sold elsewhere, the exports from Dusseldorf during the last four years were as follows:

Year ending September 30, 1876.....	\$33,336 08
1877.....	35,766 16
1878.....	40,745 94
1879.....	42,961 03

## BRAIDS, BINDINGS AND TRIMMINGS.

No signs of improvement were manifest, and business in general in 1878 having assumed the character of a universal crisis, this leading branch of Barmen's trade was naturally greatly affected.

Although the markets were substantially the same, the sale of staples became more and more difficult of effectuation, in consequence of the high duties and increasing competition in France, Austria, Russia, and the United States, the markets in the latter country being effectually closed to staple goods. In other countries the demand was slight, while prices were everywhere depressed.

For plain and fancy braids, cords, tresses, &c., the demand throughout the year was excessively slight. Woolen-yarn prices fell constantly and reached a level hitherto unknown, and business was consequently unremunerative. The condition of this branch is best shown by the following figures, which represent the exports to the United States during the last four years:

Year ending September 30, 1876.....	\$1,037,151 33
1877.....	843,038 38
1878.....	501,791 26
1879.....	303,315 63

## BUTTONS AND BUTTON MATERIALS.

In crochet and cloth buttons business was on the whole unprofitable, owing to continual overproduction consequent upon the many mechanical improvements of the last few years.

The necessities of foreign markets, the chief customers of this branch, were mostly covered from the accumulated stocks, so that both demand and prices for novelties were poor.

In consequence of overfilled warehouses goods were sold at almost any price, to the utter demoralization of the market.

The number of laborers was greatly reduced, and is now about two-thirds of the number employed under ordinary circumstances.

In the metal-button branch no material change took place, and the production was a normal one. The use of buttons for trimming ladies' dresses created a slight advance in demand and price.

The amounts exported to the United States during the last four years are given below :

Year ending September 30, 1876.....	\$124, 920 82
1877.....	143, 456 04
1878.....	204, 017 39
1879.....	175, 187 61

#### DRESS AND PIECE GOODS.

*Silk and half-silk goods.*—In the past year this branch was a great sufferer from the unpropitious state of affairs. The demand for articles, by their nature luxuries, was extremely limited. Falling prices in raw materials exercised a similar influence on manufactured goods. Too great a number of looms by far, looking for profitable employment, were invariably thrown on every fashion-favored novelty, to the inevitable loss of profit and pains.

The loss of the Austrian market was doubly disastrous to the trade, since aside from the inability to find a substitute for that market, French, Swiss, and Italian competitors, likewise shut out from Austria, threw their surplus wares on the unprotected German market.

The tenor of pending commercial treaties with Japan threatens the loss to the German export trade of that market also.

Exports to the United States during the last four years are given below :

Year ending September 30, 1876.....	\$340, 676 60
1877.....	341, 824 32
1878.....	393, 464 04
1879.....	585, 913 81

*Woolen and woolen-mixed goods.*—Business in the Zanella branch was marked by the same lagging character as in the preceding year. Sales were effected at cost price and even below it, and still greater depreciation was only prevented by a combination of the various manufacturers, whereby they bound themselves not to sell below the rates of a common price-list.

A later rise in yarns enabled manufacturers to realize somewhat better prices, though finer grades of Italian cloths were but little sought for.

The widely spread commercial crisis has greatly affected Zanella manufacturers, since about one-half the quantity manufactured in this district, representing an annual value of about reichs-marks 10,000,000, is intended for export.

Prospects in the woolen-cloth and broadcloth trade are no brighter, and the demand for fine broadcloths decreases daily. The long prevailing crisis, the uncertainty of German commercial policy, exercised on the one hand a depressing influence on business, whilst on the other France and England ruined the trade by flooding the German market with their surplus wares.

The protective policy pursued by almost all countries, in levying high duties, renders the export trade more and more difficult, and continental demand is continually decreasing. England, free to all, prefers

her own manufactures, while the German consumer, on the contrary, prefers the foreign product.

With France business is isolated and seldom. Spain, Portugal, and Scandinavia are but small consumers. Russia's demand is met at home, and America, once Germany's chief customer in broadcloths, now purchases but little else than diagonals, and the cessation of this trade is only a question of time. In South America business was rather worse than better, and with Asia little or no business can be done.

The exports of woollen piece-goods of all kinds to the United States were, during the last four years, as follows :

Year ending September 30, 1876.....	\$1,070,292 81
1877.....	1,127,020 38
1878.....	984,312 49
1879.....	1,008,063 38

#### DYES AND CHEMICALS.

The following statistics, which formed the basis of a petition to the German chancellor for the free entry of coal-tar products, and a reduction of the duty on caustic soda, give a good idea of the magnitude of the aniline trade in Germany and the relation borne to it by the trade of Barmen-Elberfeld.

The yearly production of the German alizarine and aniline factories represents a value of about 50,000,000 marks, of which 12,500,000 are produced in Barmen-Elberfeld. About one-fourth of this production is consumed in Germany, 35,000,000 or 40,000,000 being annually exported to foreign lands.

The raw materials are chiefly obtained from England, and the following figures give the annual imports :

Articles.	Yearly consumption.	Value.	Value of imports.	Percentage of imports.
	<i>Owts.</i>	<i>Marks.</i>	<i>Marks.</i>	<i>Per cent.</i>
Anthracine.....	60,000	10,000,000	9,000,000	90
Benzole.....	50,000	2,500,000	2,300,000	90
Chromate of potash.....	35,000	1,500,000	1,500,000	100
Chlorate of potash.....	10,000	500,000	500,000	100
Arsenic acid.....	20,000	200,000	200,000	100
Caustic soda.....	200,000	2,400,000	1,680,000	70
Total ...	375,000	17,100,000	15,180,000	.....

There results, therefore, from the foregoing figures, an annual addition to the nation's capital of 20,000,000 marks from the aniline trade alone.

In alizarine, prices fell at the beginning of the year, until a rise of 50 per cent. in the price of chromate of potash (chrom kali) combined with an increase of the cost of anthracine induced all manufacturers to raise their prices. The rise in anthracine continued until prices stood 100 per cent. above those at the beginning of the year. Alizarine did not keep pace with anthracine, but rose gradually from 2 marks to 3 marks per kilogram.

Caustic soda was neglected throughout the year and fell from £13 to £10 per ton.

The production of the alizarine works increased with the rise in price and may be considered to have completely superseded madder and garancine.

The exports to the United States are as follows :

Year ending September 30, 1876.....	\$119,596 86
1877.....	91,835 77
1878.....	63,935 24
1879.....	77,453 68

#### HATBANDS AND RIBBONS.

In reviewing the business of the past year, nothing is to be discovered to distinguish it from the long list of its predecessors. Raw materials were cheaper than they have been for years, silk as well as woolen yarns having been cheaper than ever before, whilst the utter absence of anything like enterprise or speculation precludes all hopes of a change, which would instill life into the trade.

Fashion was unfavorable to gentlemen's trimmings, and but little was consumed. Ladies trimmings, also, were in slight request, and most of the looms devoted to this branch of trade were idle.

The demand for silk and half-silk hatbands was affected by the prevailing depression. A portion of the looms found employment, but prices were unremunerative both for the manufacturer and the workman.

The business crisis in England injured trade with that country, whilst high tariff in Austria, America, France, and Russia makes trade with those countries barely possible. Holland and Belgium are fair customers, but unreliable politics and finances prevent all business with the South American states.

The protective policy now pursued by almost all neighboring countries is exceedingly prejudicial to this trade, since the quantity produced in this district is more than double that which Germany can consume.

The exports to the United States during the past four years were as follows :

Year ending September 30, 1876.....	\$538,961 50
1877.....	642,109 77
1878.....	562,511 08
1879.....	772,897 20

#### METALS AND MANUFACTURES OF.

Among the metallurgical industries of this district, the manufacture of hardware and cutlery, which has its seat in Remscheid and Solingen, is by far the most important. In past years the trade with the United States was of great magnitude, but latterly the crisis in the iron trade, pending changes in the German tariff, and the universal depression of business both at home and abroad, have weighed heavily on both manufacturer and laborer.

The past year was no better than its predecessors. The fluctuations of raw materials during the last twelve years are given in the following table :

[Price per 1,000 pounds, in Remscheid.]

Raw material.	1867.	1872.	1873.	1875.	1877.	1878.
	Marks.	Marks.	Marks.	Marks.	Marks.	Marks.
Siegen pig-iron I <sup>a</sup> .....	33	90	49½	34½	30	31
Siegen spiegel-iron.....	48	120	72	46½	37	38
Rolled iron I <sup>a</sup> .....	108	210	144	108½	84	72-81
Puddled steel.....	111	213	150	108	84	81
Sheet-iron.....	197	294	204	165	90	90
Cement iron.....	195	330	255	334	180	180
Cast sheet-steel.....	354	435	390	309	I 300 II 280	275 225
Cement file-steel.....	156	294	225	180	140	140
Refined steel.....	270	420	330	249	210	210
German cast file-steel.....	240	375	315	240	190	185
Coal.....	0.72	1.43	1.43	0.80	0.55	0.55
Cokes.....	0.80	2.25	2.25	1.05	0.70	0.70



The price of almost all kinds of manufactured metals was lower in the past year than ever before. The inadequate demand in Germany, which in the best of times does not consume the half of the goods produced in this district, forces the trade to seek in export a means of employing their laborers.

The low price of raw materials has enabled German manufacturers to compete successfully with Belgium in nails, with England in chains, vices, &c. The competition of convict labor, against which the trade has as yet unavailingly appealed, is a continual source of annoyance and loss.

For weapons the demand was very slight, the only orders of importance coming from Roumania.

For fancy and luxury articles there was no demand.

Table knives and forks, a specialty of the Solingen district, were confined almost entirely to the home market.

The manufacture of butcher knives was greatly improved, and was extended to sorts hitherto exclusively made in France and England.

Pen and pocket knives suffered less from a lack of orders than from depressed prices. On the whole, but common and middling sorts were sought for.

The German trade was dull; the foreign trade, the main dependence of this branch, was good in Austria. Large orders were also received from Roumania; but the demand falling off, large stocks remain on hand in that country. Russia's finances and high duties killed trade there. With Turkey business was fairly good, and in Italy and Spain much better than could be expected; whilst with the United States, the best consumers of finer wares, sales were slight or almost entirely of commoner goods.

In the scissors trade business was unsatisfactory, although the product of this district is of unequalled excellence. The cause lies, doubtless, in the all-prevailing crisis. This was very perceptible in the smallness of the usually large English orders, in which country, with free entry, successful competition is a long-established fact.

With other countries, business was much like that of the knife trade. In the United States the demand has fallen off, in consequence of the articles being manufactured there.

The exports to the United States during the last four years were—

Year ending September 30, 1876.....	\$337,944 34
1877.....	322,159 47
1878.....	455,828 30
1879.....	561,588 78

EDGAR STANTON.

UNITED STATES CONSULATE.

*Barmen, October 18, 1879.*

## BAVARIA.

*Report, by Consul Wilson, on labor and wages, agriculture, wine and hop product, and trade with the United States, of Bavaria, for the year ending September 30, 1879.*

In compliance with the requirements of consular regulations, I have the honor to submit herewith my annual report, showing the description and value of the exports from this consular district to the United

States, during the past commercial year, together with a brief reference to the agricultural and industrial interests of this neighborhood.

In reviewing the commercial relations of this consular district with the United States, during the year ending on the 30th ultimo, I find nothing of striking interest which presents itself for comment. The commercial depression which has weighed so heavily upon this community, and adverted to in my last three or four annual reports, is still felt, though, of late, there are some signs of business improvement.

#### LABOR AND WAGES.

In the industries of this consulate, and the matter of labor and wages, there has been no perceptible change during the year past from the preceding one. It was hardly possible for wages to get any lower, since it is almost impossible for the laboring men and their families to subsist on what they do receive and have received for the past few years.

The present wages for skilled journeymen mechanics, who board themselves, is from 70 to 80 cents per diem, while unskilled labor, such as inferior hands and helpers in breweries, &c., with full board, receive from \$1 to \$1.50 per week.

Female help command only about two-thirds as much for equally laborious work. The best farm hands, such as have employment only part of the time in the vineyards and at harvesting time, receive about the same wages as above. In exceptional cases men and women earn a little more, where they have "piece-work" from the factories and elsewhere, and who are experts, or labor more hours. The military requirements of the country, for centuries, have made the women an important auxiliary, both in the factories and upon the farms, nor are they exempt from the drudgeries of the town, such as sawing wood, carrying brick, mortar, &c. So, too, the cow, the most indispensable and domestic of all animals, is required to perform the labor that is assigned to horses and oxen in our country; the army requiring most of the horses, while the steers are stalled and fattened for the largest markets.

The manufacturers still complain of a paucity of orders; though, of late, they have received considerable more encouragement from the United States.

With the mechanics and other workmen here, it is not so much a question of rates of wages as for steady employment. I am quite sure I speak within bounds, when I say that for every kind of trade there are from five to twenty-five candidates for each vacancy, and probably a larger percentage for unskilled labor. However remarkable it may seem, the cost of living has not been perceptibly reduced since the hard times set in. The prices of house rent and necessities of life having advanced in the flush times, immediately succeeding the Franco-German war of 1870-'71, in a greater proportion than the wages of the workmen, has made it very difficult for this most useful class of society to support themselves and families, especially since wages have been reduced full 100 per cent. or more. And I am not unmindful of or influenced by the cry of pessimists who abound here as well as elsewhere, and who never mean to work if they can possibly help it.

I may here remark that during the three past years of commercial and industrial dullness a beneficent Providence has been most bountiful to the husbandman of Bavaria. The season's having been exceptionally wet, has made the light, sandy, and loamy soil of this kingdom unusually productive, thereby furnishing more employment and greater means of subsistence. The country seems to be overpopulated; at any rate, as

before intimated, there is a large surplus of laborers. Under such circumstances there has not been, and is not likely to be, any labor outbreaks or "strikes" among those who are so fortunate as to be employed. But the social or communistic element is strong in this and other manufacturing centers, and were it not for the military, which is constantly kept well in hand, and stands as a warning and a menace to such evil-doers, I have no doubt that these turbulent citizens would commit overt acts of violence. I believe the Royal Bavarian Government and the different municipal authorities are constantly making public improvements, partly with a view to giving employment to the most needy, and yet there is a constant cry for "more work!" In view of such a melancholy condition of affairs, it is often very trying to the United States consul to have to listen to the lamentations of his own countrymen in the persons of the German-American citizens who have returned to the fatherland during the past decade while laboring under the delusion that here they could find more wages and cheaper living, which hallucination does not leave them so long as they have a dollar left; but when they find their money and welcome both gone they realize the utter helplessness of their condition. Some of them are mechanics who have brought their improved American tools with them, and who are able and willing to work if they could obtain it. But this is absolutely impossible. Those formerly who were able to get temporary employment find it almost impossible to get along harmoniously, since all work is done so differently here.

Without the hope of obtaining work, sympathy, or, *what they most desire*, a return ticket to the United States, their adopted home, which they had so foolishly abandoned, they naturally betake themselves to the nearest United States consul for such help and sympathy as they can obtain. If the consul has not already become callous through his experience with professional frauds who may have imposed upon his good nature and robbed him of his private means (which not unfrequently happens), he has a sympathetic ear, and is ready to bestow such feeble assistance as lies in his power. When the applicants find the consul is unable to send them "home" many of them break down like homesick children. Of late we have less applications from this class than we did a few months ago, and it is presumed that the greatly-improved times in the United States has turned all back that could possibly go; and yet, from my own observation, and from what I have heard from my colleagues, I am of the opinion if it was known that a large and well-provisioned steamship was lying at the port of Hamburg or Bremen, and ready to convey all needy German-American citizens (exclusive of tramps) and their families back to the United States *free of cost*, said ship could be filled with a happy and grateful people in less than one week.

If such be the case, and while it is not within my province to make recommendations or suggestions in the premises, it would seem that "emigrant aid" societies and others interested might take such cases into favorable consideration. The steamship companies now plying between Hamburg, Bremen, and New York sometimes make a reduction of one-third for the passage of such destitute people. It is presumed that they would make still greater reductions if a large number should apply together. Certainly this experienced class would be more desirable for producers, and would make more patriotic citizens than new emigrants. Moreover, this class, being American citizens, would be more interested and feel the value of such citizenship more than they would had they never left our country, where they and their children could

reasonably expect a prosperous future. They also have found out that there is no room for them here and that their absence would be a source of relief to the communities upon which they are now, or are likely to become, a burden. Besides this, they would exercise a powerful influence over such of their countrymen who might think they could do better in Europe than in the United States, if any such there be left in our country, which I hope not.

I may add that, having forfeited their citizenship in their native land, all the eleemosynary institutions here are closed against them and theirs, except, perhaps, in cases of the last extremity.

#### AGRICULTURE.

Contrary to general expectation, the present agricultural year has been a most prosperous one to the husbandman in Germany, and, in general, provisions will hold at average prices.

With perhaps the exception of the hop and grape crop, which I will refer to specially hereafter, the harvest in Bavaria has been quite extraordinary under the circumstances.

The last winter was an open one, with scarcely any snow until after the 20th of March, when there were two heavy falls. The spring was propitious for seeding. The planting and sowing took place at the usual time. The crops came forward in splendid condition; but by the 1st of June the showers seemed to have merged into one almost continuous storm, raining apparently two-thirds of the time up to about the 1st of August—so much rain falling that heavy freshets and inundations took place on many parts of the Continent. However, the soil of the meadows of Bavaria, being generally of a sandy loam, could stand a great amount of this bounty of nature. The roots and grains kept on growing, while there were intervals of hot sunshine, giving the grain a chance to head out finely. But the usual time for harvesting went past before the crop could possibly be gathered, even if it had ripened. Much of the grass crop (which was heavy) had to be cut in the rain, carried in baskets, wheelbarrows, and the like to the barns and houses and be cured as best it could. With such a condition of affairs the prospect for a successful harvest looked most gloomy, thereby giving that irrepressible character, to be found in all parts of the world, and known as the “croaker,” an opportunity for prognosticating evil, such as famines, &c. The wet weather continued up to about the 1st of August. The weather then changed to warm and sunny, which continued almost uninterruptedly to the end of September.

As harvesting operations advanced it became evident that, at least in Bavaria, the result would be most satisfactory. The rye and barley crops were gathered early after the fine weather set in, and were found to be much above expectation both in quantity and quality. Later the wheat was harvested under like favorable circumstances. So, too, with all kinds of fruit, vegetables, and succulents, the yield has been extraordinarily good. The following is an average statement of this year's grain crop in the four principal agricultural districts of Bavaria:

*Wheat*.—Very good both in quantity and quality. There will be a considerable surplus for export to other less-favored German states.

*Rye*.—Good. Quality better than last year, though somewhat less in quantity.

*Barley*.—Good in quality, and quantity greater than last year.

*Oats*.—Very good. Considerable better than the crop of 1878.

## WINE.

The wood of the vineyards, on which the quantity of the succeeding year principally depends, had ripened very well the last year. The winter was sufficiently damp, and so two principal conditions were fulfilled; and, provided the weather in the spring and summer was favorable, a good crop might have been expected. But late in the spring (March 23 and 24) violent snow-storms were experienced, thereby retarding the vegetation materially. Life started but slowly in the vines, and, in consequence, many of the germs refused to quicken; accordingly, only a medium crop in quantity could be expected. By the continued unfavorable weather for the vine the growth of the buds remained much behind. In favorable seasons the blossoms appear about from the first to the middle of June. The best localities this year did not blossom until near the 1st of July, the medium and inferior localities still later, and the vineyards made only slow advances. The continued cold and wet weather in July caused many grapes to fall off—especially of the more tender varieties—and the prospect for quantity was greatly reduced. Indeed, so gloomy was the outlook, that not only the pessimists but all wine-growers predicted an almost utter failure of the crop. It was believed that only continued good weather could ripen what was remaining upon the vines. Fortunately, the weather changed for the better. The warm and pleasant months of August and September have greatly promoted the condition of the berries and raised the hopes of the wine-makers; and, if the weather remains favorable for four weeks longer (which is not likely), a small serviceable crop may still be secured, for which, in view of all the unfavorable circumstances, the vine-dressers will be, doubtless, duly grateful. In some districts out of Bavaria hail-storms have totally destroyed the crop, and even injured the vineyards for some years to come. It is represented that the vineyards upon the Main, in the vicinity of Wuerzburg and Schweinfurt, this consulate, are in better condition, and more to be expected from them this year, than in the more extended vineyards in the neighborhood of the Rhine.

## HOPS.

Hops, the first staple product of the kingdom, like the wine product, this year will be only a half crop, or less. In consequence of the heavy and continuous rain adverted to above, which fell during the months of June and July (the most important months for the development of the plant), the vines were kept back and looked extremely poor, so it was feared that in the greater part of the hop district of the continent and England, the crop of 1879 would be a total failure. The recovery of the vineyards situated in the valleys seemed to be out of question; whilst those yards on the elevated grounds had a chance for improvement, if the weather would change for the better. And, indeed, it was a fortunate event for the hop-growers and the community of Bavaria in general that the weather became warm and almost continually pleasant up to the end of September; the result of which is that the yield of the Bavarian crop will be about one-half of last year in quantity, and the general quality and color turns out exceedingly fine and healthy.

The crop in the German Empire is likewise so, as regards the quantity and quality. Bohemia is somewhat better in quantity, but not in color, whilst the English crop is an almost entire failure.

The hop business opened about three weeks ago, and continues very active for home consumption and for export to England. A large part

of the crop is already in the hands of the merchants, and prices range from 200 to 250 marks, or from \$49.10 to \$62.20 per cwt.; while the superior "Spalt" hop commands as high as 380 marks (\$78.54) per cwt. at the farmer's, at the places of production.

Considering on the one side that trade in general has not revived much, and that the stock of yearlings in brewers' hands is pretty considerable; on the other side that the consumption of beer is nearly equal to former years, and that England has sufficient demand to cover her large deficiency, the present state of affairs seems to be justified. Were it not for the hop exportation from the United States to the English markets, the dealers here could count on considerably higher profit this year. The farmers of our country are creating consternation and exciting envy not only among the stock-raisers and grain-growers of Europe, but are accelerating the movement of the slow-going hop-growers of Bavaria, who once flattered themselves that no other country possessed such hop-growing lands. Our farmers are fast demonstrating that they cannot only supply our own breweries with their full demands, but the deficiencies of all other countries can be met.

It is represented that at the present time a good many American hops are on the way to England. I have heard of none coming to the Continent this year, and probably there will be few or none.

*Hop export to the United States.*—The following table shows the yearly amount of hops exported through this consulate to the United States during the past nine years. The figures are interesting, and sustain the above views. It may be here remarked that the small shipments that go to our country now from here are simply for samples for fancy exhibition and the like:

*Gold value of hops passed through this consulate.*

1871 .....	\$86,668 02
1872 .....	267,571 22
1873 .....	502,567 66
1874 .....	572,988 86
1875 .....	11,571 22
1876 .....	12,447 70
1877 .....	1,975 40
1878 .....	4,536 18
1879 .....	7,947 70

While the above figures are depressing to hop-merchants here, they must be stimulating to our own hop-growers and exporters.

The hop is the most profitable staple raised in Bavaria, and has been so regarded for centuries; and since the beginning of this century Nuremberg has been acknowledged the greatest hop center of the continent, if not of the whole world, and the hop is the leading article of commerce in Bavaria. As evidence of the traffic, I will quote from my annual report for 1877:

Nuremberg has indisputably maintained her reputation, to which the statistical fact bears testimony, that there was exported by rail during last season hops amounting to over \$18,326,000, besides the enormous quantities which changed hands in the markets and warehouses.

In some of the districts of Bavaria the soil is chemically and peculiarly well adapted to imparting a rich aromatic flavor to the hop, and the farmers of these particular neighborhoods are more fore-handed than those of other parts of Bavaria, for they receive about one-third more for their product, and their hops are well known over the world as the "Spalt" hops. Unfortunately for the hop farmer of this country, he is

compelled to content himself with small recompense for his labor. And this arises from the fact that the hop-growers are mostly small farmers who till leased lands, and who have no storehouses or other conveniences for curing and preparing their product for the markets; therefore they sell their whole crop oftentimes before it is gathered to the city speculators, capitalists, or exporters, and those sharper operators invariably take the lion's share of the profit.

In view of the fact that the consumption of hops is increasing enormously in all civilized countries, and likely to continue, the culture and traffic in the article will grow more and more in importance in all countries favorable for its production. It is regarded as a more certain crop and easier handled than the wine crop, and, I believe, requiring stronger land.

There is cultivated for the hop-vineyards of Bavaria about 18,500 hectares; in the German Empire, 38,000 hectares. (One hectare is about 3 acres, or 10,000 square meters.)

Bavaria produces one-fifth of the whole world's crop. An average crop is, in Bavaria, about 220,000 cwt.; in Germany, about 480,000 cwt. Bavaria's crop this year is about 120,000 cwt.; Germany's about 480,000 cwt. The Bavarian brewers consume yearly 80,000 to 90,000 cwt.; the German, 320,000 cwt.

Respecting the cultivation of hops and the consumption of beer, very much has been written, and as the statistics increase from year to year in our country, so will the matter be more and more discussed. The raising of hops and the manufacture of beer in the United States has made it an article of trade of much importance in its economical and social, as well as ethical and fiscal, bearing. It will not be expected of me to enter into a history of the beer trade in this report, though, as a matter of fact, beer, as a beverage, has been patronized by almost all civilized nations and governments since the very early times. It was not until after 1240 that beer became an article of export. The old Germans used barley, and later wheat, oats, and spelt.

The city of Nuremberg in 1290 prohibited the use of oats, rye, spelt, and wheat for brewing purposes and only allowed the use of barley.\*

It has therefore occurred to me that it might be interesting for this report to mention that the manufacture of beer in Bavaria has to be done strictly according to law. The law requires beer to be made from certain ingredients only, and according to a certain standard, and government commissioners and sanitary officers are required to inspect the manufacture of beer in all its details, and especially to see that it is *pure* and healthy. This is all-important, since it is one of the principal articles of diet among the laboring and poorer classes of Bavaria. I use the word "diet," for the above classes regard their beer as both *vitals and drink*, many of them being obliged to live almost entirely off of beer, black bread, and potatoes.

The statistics, taken from a newspaper and believed to be correct, show that Bavaria is the greatest beer-consuming state in the world. It appears that, according to the statistics, the inhabitants of Bavaria, nearly or quite 5,000,000 in number, drink annually about 147½ gallons of beer each.

---

\* There exist various police regulations concerning breweries of the sixteenth century, and one of the year 1516 particularly orders that beer shall henceforth be brewed only and exclusively of barley, hops, and water; and although these regulations remained for a long time and in many instances a dead letter, those materials must to this day be exclusively used for brown beer in Bavaria, no other being legally admitted.

The figures given for the two principal cities are even more striking. Nuremberg, with a population of 90,000, consumes annually about 212 gallons per inhabitant. The population of Munich is about 175,000; the beer consumed annually is put down at 248 gallons for each person.\*

You will also find inclosed the report showing the average humidity of each month during the last fiscal year, ending June 30 last (furnished by the meteorological station of this city), agreeably to the requirements of circular dispatch, Department of State, Washington, D. C., April 3, 1879.

#### IMPORTS.

I regret that I have nothing especially encouraging to report under this head. Since the American products consumed in this district are nearly all entered at the custom-houses of Hamburg and Bremen, I have no means of knowing, even approximately, the amount imported or purchased for this market; the dealers here obtaining their supplies from the wholesale houses of the above-named ports. Our staple articles consumed here are petroleum, lard, canned meats, hardware, and sewing-machines. Of late I have noticed a variety of American handiwork in the shop windows, such as useful household implements, "Yankee notions," &c., though I imagine the sales are slow, since the inhabitants of this particular town have always been chary of what they regard as luxuries and unknown to their remote ancestors. Moreover, in easier times they have borne the reputation for great frugality, except in the outlay for their favorite beverage.

So long as employment and money remain as scarce as now, so long will the masses refrain from investing to any great extent in our American productions, however much they might or would like to do so under more favorable circumstances.

They take less kindly to importations than exportations; for by the latter they and their ancestors have thrived, and, I may add, during the past century the United States have been among their very best customers. They are keenly sensitive to the fluctuations of our business. The rapidly improving condition of our commerce and industries is sensibly and most satisfactorily felt at the present time.

The new German tariff, which goes into operation on 1st of January, 1880, will have the effect of retarding the continued sale of some of our staples that have been introduced here. For instance, the sale of bleached cottons in Germany cannot longer be counted upon. An enterprising importing firm here, adverted to at length in my report of last year, who had been at great pains to introduce our bleached domestics into this market, and who had until the last few months great hopes of success, inform me that since last March the prices of American shirtings have steadily advanced in the United States, in some cases as much as 20 per cent.; in no case less than 10 per cent. In conformity with the advance of the raw material, German manufacturers have likewise shown a tendency to advance prices, but have contented themselves with an increase of about 5 per cent. This inclination, however, has gradually subsided again. There are large stocks of raw material on hand at previous low prices, and business is so bad that German manufacturers will gladly sell at old prices; hence we are unable to compete. Aside from this, we shall have, on and after the 1st of January proximo, the new

---

\* The citizens of Nuremberg and Munich are really not entitled to so much beer fame, since those cities have two large military garrisons, who consume much beer, and the soldiers are not numbered among the inhabitants.



German tariff referred to. Bleached cottons, which have heretofore paid 60 reichs-marks per 100 kilograms, will thereafter pay 100 marks per 100 kilograms.

Now, look at the following calculation: A medium good quality of American shirtings will cost 10 cents, or 42½ pfennige, and will weigh per yard 125 grams; hence the yard will cost, import duty, 12.50 pfennige (about 3 cents), or 30 per cent. ad valorem. The raw material being imported free of duty, the manufactured goods, however, costing 30 per cent., it is hardly to be supposed that the United States can produce the article so much cheaper as to counterbalance this protective tariff.

The consulates are often in receipt of letters of inquiry from our manufacturers and exporters and others interested in placing our productions upon the market, some of which can be answered satisfactorily and others cannot. I believe that depots, warehouses, &c., have been established in the seaports of Hamburg and Bremen, where almost every variety of our wares, provisions, &c., are on exhibition and offered for sale, and from whence the retailers draw their supplies. But the objections to these places are their remoteness from the center of population and consumption.

In my special report of December 15, 1877, I took occasion to express the opinion that it would be advisable if some of our representative manufacturers and producers of the staple articles for this trade would combine and establish a permanent depot or exhibition building at a more central point, like Frankfort-on-the-Main, where could be kept at all times samples of their handiwork, agricultural products, and from which "headquarters" could be sent out traveling agents and solicitors for orders, capable of explaining the peculiar merits of the articles they represented, and who could energetically push their goods into all the markets of Germany, Austria, Switzerland, and other countries south and east. I was then, and am now, of the opinion that such a project is feasible and would prove a success, provided, always, it was managed upon correct business principles and by the right men. From such a point samples and representatives could be quickly furnished, and be a saving of time and money, and generally be more or less accessible to such customers and consumers who might desire to visit the establishment for personal inspection.

JAMES M. WILSON.

UNITED STATES CONSULATE,  
Nuremberg, October 10, 1879.

---

#### BRAKE—NORDENHAMM.

*Report, by Consular Agent Gross, on the trade and navigation of the ports of Brake and Nordenhamm, for the year ending December 31, 1878.*

#### BRAKE.

*Navigation.*—Total entries during the said year numbered 555 seagoing vessels, of about 72,556 tons register, and 3,142 total number of crew, against 513 vessels, 73,233 tons register, and 3,046 number of crew, in 1877.

Number of these vessels which carried the German flag, 421; Belgian flag, 1; Russian flag, 3; British flag, 61; Norwegian flag, 13; Danish flag, 4; Hollandish flag, 43; Swedish flag, 9. Total as above, 555; of

which 57 were propelled by steam and screw. Number of these vessels which arrived from North Sea and Baltic, 192; Norway, 80; France, 7; Russia, 66; English ports, 153; Portugal, 1; Sweden, 34; Holland, 8; Turkey, 1; United States, 10; Canary Islands, 1; Colombia, 1; Nicaragua, 1. Total as above, 555 sea-going vessels.

The cargo of these vessels consisted of timber and deals, 190; coals, 52; cement, 30; iron manufactured and in pigs, 27; iron and coke combined, 4; slates, 11; broken glass, 7; flint-stones, 4; pipe-clay, 6; zinc ore, 2; salt and cork-wood, 1; guano, 5; tar, 3; hemp, 2; fire-bricks, 2; bricks, 7; ice, 3; tobacco, 1; herrings, 1; oats, 8; wheat, 2; barley, 1; rye, 21; potatoes, 18; wine, 1; general cargo, 41; ballast or empty, 105. Total, 555 cargoes.

*Exports.*—The export trade by sea was carried on by 540 sea-going vessels of 71,491 tons register, and total number of crew 3,083. Number of these vessels cleared from here to German ports in the Northern and Baltic, 199; Danish ports, 2; Portugal, 11; Norway, 85; Holland, 6; Canary Isles, 2; Sweden, 34; France, 4; Cape Verde Isles, 1; Russia, 69; England, 103; United States, 8; Sea, 40; Mexico, 1; West Indies, 5. Total as above, 540 vessels, of which 354 sailed in ballast, 11 with cokes, 12 with tobacco, 52 with general cargo, 11 with asphalt, 7 with pit-props, 30 with coals, 7 with glass bottles, 5 with pig iron, and 16 with railway iron; 5 with sugar, 4 with timber, 4 with rice meal, 7 with straw, and 15 with different cargoes. Total, 186 cargoes and 354 ballasted.

As no official register of imports or exports is kept by the harbor officials—no custom-house existing here, Brake being a free port—I am sorry not to be able to state the approximate value of these cargoes.

*General trade.*—Of the trade of the port of Brake in special, and in general of the trade of the Grand Duchy of Oldenburg, there is nothing else to report as of the trade of the whole empire—stagnation, it being only carried on in the hopes of a near revival by the interested. The principal articles of import and export are above stated; besides those, the agricultural produce of this province—consisting in the produce of live cattle (fat), about 30,000 a year; horses of a very good quality, pigs, oats, barley, beans, and butter, of which the last four named articles are mostly for British markets, whither live cattle cannot be exported—creates at times a very lively business, although at low prices, hardly paying the farmers for their trouble.

*Manufactures.*—Of the manufacturing business it can only be said that it is carried on by those interested in expectation of better times. Ship-building, roperies, canvas manufactories, spinning factories, all find themselves in the same predicament. Wherefore I omit to enter into details, for fear to prejudice any later reports.

#### NORDENHAMM.

Of Nordenhamm the same may be said as before stated, with the exception that no proper trade is carried on there by its inhabitants, but only by the intervention of Brake merchants. For the year ending December 31, 1878, there entered 18 vessels, of about 16,000 register tons, and 319 men, bringing 15 cargoes of naphtha or petroleum, and 3 cargoes of rye; of these vessels, 16 arrived from the United States, and two from Russia; 9 carried the British, 2 the United States, 4 the Norwegian, 2 the German, and 1 the Italian flag.

The principal import there consisted of naphtha and petroleum, which

were landed and stored there or forwarded to Bremen, there to be refined. The imports in all consisted of about 86,000 barrels, both crude oil, petroleum, or naphtha.

Since the latter end of February this year (1879), the petroleum trade influenced by the threatening aspect of an import duty of about \$1.50 per 100 kilograms or 2 cwt., increased most wonderfully. Up to the latter end of March there were imported there by nine different vessels, 9,200 barrels of naphtha, 7,619 barrels of crude oil, and 19,600 barrels of refined petroleum, against 8,500 barrels of crude oil only in 1878, at the same period. Besides the above importation in this year, there are now in the course of erection about 16 sheds, all destined for the warehousing of refined petroleum, advised to arrive from the United States by sailing-ships in the course of the next two months, to the number of about 100,000 barrels. By this lucky event Nordenhamm (which was once destined by the ducal government to be made equal to Bremerhaven or Geestemünde, on the other side of the river Weser, so far as dock and railway commodities might enable it to become, but for want of money has been neglected for several years) gets a new impulse, which may lead government, perhaps, to complete the commenced works.

Till now, Nordenhamm is only an open roadstead, where ships discharge their cargoes, either in lighters or at the end of two piers built into the river Weser, which give to vessels a very poor discharging place.

The trade of Nordenhamm, as aforesaid, amounts to nearly nothing except export of live cattle to the other side of the river Weser or to Hamburg in a very small compass. On other articles nothing is to be mentioned.

JOH. G. GROSS.

UNITED STATES CONSULAR AGENCY,  
*Brake-Weser, April 23, 1879.*

---

## BREMEN.

*Report, by Consul Grinnell, on the commerce of the port of Bremen for the year 1878.*

In accordance with instructions in paragraph 380, &c., of the consular regulations of 1874, I have the honor to submit the following tables showing the commerce of Bremen for the year 1878:

Total imports and exports from and to the United States and from and to all countries.

Statement showing total emigration from Bremen to the United States.

The total imports from all countries to Bremen amount to about \$103,000,000, and of this amount more than one-third comes directly from the United States.

The principal articles sent hither from the United States are cotton, about \$12,250,000; petroleum, about \$8,750,000; tobacco, about \$7,750,000; lard, about \$2,750,000.

It is to be regretted that the figures show an insignificant amount of our manufactures of cotton, while Great Britain sends direct to Germany of cotton yarns and piece goods as much as \$20,000,000 worth per annum. A large portion of this business should be gained by us.

Of butter and cheese we could send an almost unlimited quantity if proper care were taken to supply the qualities which are salable here, to adopt the style of packing in vogue, &c.; all which can easily be ascertained.

Of rye we send but to the value of \$750,000, while Russia supplies nearly eight times the amount, largely by the long route across the Black Sea, the Mediterranean, &c., and that, too, while the Russian rye is quite inferior to our own.

Bremen being neither an agricultural nor a manufacturing district, there is nothing further to report regarding it.

W. F. GRINNELL.

UNITED STATES CONSULATE,  
Bremen, October 31, 1879.

*Statement showing the total imports from the United States and from all countries at Bremen, during the year ending December 31, 1878.*

Description of goods.	Imports from the United States.		Imports from all countries.	
	Weight.	Value.	Weight.	Value.
	<i>Cwt. gross.</i>		<i>Cwt. gross.</i>	
Articles of consumption .....	2,994,270	\$14,401,007	10,373,258	\$43,625,300
Unmanufactured goods .....	5,747,860	22,497,990	16,619,229	36,942,178
Half manufactured goods .....	7,203	171,785	269,160	5,442,998
Manufactured goods .....	346	19,028	146,645	11,062,079
Other industrial products .....	69,866	639,205	1,005,212	7,933,086
Precious metals .....	31	50,153	31	50,820
<b>Total .....</b>	<b>8,819,576</b>	<b>37,779,756</b>	<b>28,413,535</b>	<b>105,056,481</b>

*Statement showing the total exports from Bremen to the United States and to all countries, during the year ending December 31, 1878.*

Description of goods.	To the United States.		To all countries.	
	Weight.	Value.	Weight.	Value.
	<i>Cwt. gross.</i>		<i>Cwt. gross.</i>	
Articles of consumption .....	156,526	\$711,516	8,238,122	\$42,804,315
Unmanufactured goods .....	284,486	752,319	10,880,212	38,046,724
Half manufactured goods .....	21,094	516,737	149,714	5,008,869
Manufactured goods .....	79,117	7,785,895	121,136	9,808,773
Other industrial products .....	408,087	3,720,804	873,567	6,991,458
Precious metals .....			31	51,225
<b>Total .....</b>	<b>949,310</b>	<b>13,486,771</b>	<b>20,262,782</b>	<b>102,711,364</b>

*Statement showing the total emigration via Bremen to the United States, according to the sex and native country, during the year ending December 31, 1878.*

From—	Male.	Female.	Total.
Prussia .....	3,790	2,946	6,745
Other parts of Germany .....	2,687	1,750	4,437
Other parts of Europe .....	2,626	2,238	4,864
Other .....	2,928	1,772	4,700
<b>Total .....</b>	<b>12,040</b>	<b>8,706</b>	<b>20,746</b>

## BRESLAU.

*Report, by Consul Dithmar, on the trade, industries, crops, prices of provisions, and the rates of wages, for the consular district of Breslau (province of Silesia), for the years 1878 and 1879.*

The past year has shown no improvement in the condition of trade and industry in this part of Germany. Prices of many fabrics and products, and consequently of labor, have again met with reductions, and, although some manufacturers and agriculturists may be benefited by the recently enacted tariff laws, the opinion prevails in commercial circles that in other branches of industry their effect will be the reverse of beneficial.

## THE CROPS.

The official report, founded upon estimates made in July, of the condition of the crops in this province (Silesia), was very favorable. In these estimates, as compared with 1878, wheat showed an increase of 2 per centum, rye 4 per centum, and oats 9 per centum; barley a decrease of 10 per centum and potatoes of 5 per centum. These reports, however, were prepared at a time when the growing grain was in a fine condition, and favorable weather for harvesting was expected. Probably the statement of the actual yield, to be made in November, will show this year's harvest to be much less in quantity and inferior in quality to those of last year. Already complaints are heard of the injury to the potato crop by rot.

In 1878 there were produced in Silesia—

	Tons of 2,240 pounds.
Wheat .....	272, 487
Rye .....	810, 947
Barley .....	279, 772
Oats .....	494, 340
Buckwheat .....	8, 752
Potatoes .....	3, 846, 537
Meadow hay .....	946, 237

The average yield per hectare was—

	Kilograms.
Wheat .....	1, 706
Rye .....	1, 271
Barley .....	1, 074
Oats .....	1, 492
Buckwheat .....	727
Potatoes .....	12, 148
Meadow hay .....	2, 813

The following table shows the number of hectares devoted to the various products of the soil in this province in 1878:

	Hectares.
Winter wheat .....	155, 612
Spring wheat .....	5, 965
Winter rye .....	627, 117
Spring rye .....	10, 568
Barley .....	164, 490
Oats .....	331, 649
Buckwheat .....	12, 568
Millet .....	4, 378
Maize .....	8, 975
Pease .....	23, 538
Lentils .....	685
Table beans .....	275

	Hectares.
Fodder beans .....	1,877
Vetches .....	21,156
Lupines for plowing under .....	20,130
Lupines for fodder, &c .....	28,265
Mixed crops .....	34,777
Potatoes .....	317,008
White sugar-beets .....	10,340
Kohlrabi .....	1,078
Cabbage .....	8,361
Cucumbers .....	374
Onions .....	212
Other vegetables .....	587
Rape seed .....	27,802
Poppies .....	211
Mustard .....	129
Flax .....	15,609
Hemp .....	39
Tobacco .....	297
Hops .....	14
Chicory .....	552
Caraway seed .....	5
Teasels .....	7
Madder .....	4
Other plants of commerce .....	44
Clover as main product .....	199,399
Clover as secondary product .....	3,787
Lucerne .....	5,401
Esparsette .....	1,295
Serradella .....	2,250
Timothy .....	470
Ray grass .....	1,099
Other grasses .....	989
Other fodder plants .....	16,703
Of gardens there were .....	15,045
Pasture fields .....	32,068
Total of tilled lands, including gardens .....	2,233,734
Meadow lands .....	347,136
Grazing lands .....	75,064
Vineyards .....	1,501
State woodlands .....	152,450
Communal woodlands .....	105,595
Private woodlands .....	904,982
Marsh lands .....	32,046
Barren and waste lands .....	10,733
Public roads and streets .....	109,253
Lands occupied by buildings and for manufacturing purposes .....	56,503
Total area of the province .....	4,028,996

## PRICES OF GRAIN.

The following table giving the average prices in marks and pfennigs, per 100 kilograms, of grain in the first six months of 1879, shows a steady increase since February :

Months.	Wheat.	Rye.	Barley.	Oats.
January .....	17.60	13.00	14.10	12.40
February .....	17.50	12.90	14.00	12.30
March .....	17.90	13.00	14.00	12.50
April .....	18.20	13.10	14.10	12.90
May .....	19.10	13.60	14.20	13.40
June .....	19.30	13.70	14.20	13.70

The prices continued to advance, until at the end of September, when the quotations were as follows :

Grains.	Highest. Lowest.	
	Marks.	Pfennigs.
Wheat, white.....	20. 50	17. 60
Wheat, yellow.....	19. 10	17. 20
Rye.....	15. 70	14. 20
Barley.....	16. 00	13. 40
Oats, old.....	13. 40	12. 00
Oats, new.....	12. 00	10. 60

#### THE NEW TARIFF AND THE IMPORTATION OF BREADSTUFFS.

There are in the city of Breslau alone more than 300 firms dealing exclusively or in part in breadstuffs, and the Chamber of Commerce, in its protest against the import duty on grain, after showing that the value of the importations increased from 279,300,000 marks in 1872 to 595,500,000 marks in 1876, while the exports increased only from 215,100,000 in 1872 to 222,200,000 in 1876, proceeds to show how the new tariff will be detrimental to both exportation and importation, as follows :

Whoever has studied the imperial statistics for the last few years cannot resist the conclusion that the German Empire, and specially our province, is no longer able to raise breadstuffs in sufficient quantity to meet the demand for home consumption. We are, hence, even in years of abundant harvests, such as the last, compelled to resort to importation from Russia, Poland, and Austria-Hungary, while the demand for our wheat in France, Belgium, and England is constantly diminishing, owing to the annually increasing shipments from the United States. Our dealers have heretofore mixed the grain imported from the east with the superior domestic product for export purposes. But should a duty be imposed on foreign grain equal to the very limited profits now realized by the dealer, the importation from Russia and Hungary must cease, and the high price of our breadstuffs will render further competition with the American article in France, Belgium, and England impossible.

#### BUTTER EXPORT.

The supply of butter last year, although not greater than in previous years, far exceeded the demand, and prices fell in consequence. The exportation of butter to England, Denmark, Hamburg, and Bremen, formerly quite considerable, was greatly diminished, owing to the large shipments of cheaper American butter to those places.

#### COAL PRODUCT.

The quantity of coal mined in Silesia in 1878 was 207,634,168 centners, against 202,371,303 in 1877, and 212,367,596 in 1876. Of brown coal, an inferior article, there were produced, in addition, 8,885,089 centners, against 8,771,166 in 1877, and 9,250,000 in 1876. The price of coal at the mines, which in 1875 was 28.2 pfennigs per centner, was in 1878 only 19.7 pfennigs per centner.

#### IRON AND STEEL PRODUCT.

During the year 1878 the prices of rolled and cast-iron wares receded until they reached a point lower than they had been for some decades. Steel declined also. Since the passage of the new tariff laws, however, prices have had an upward tendency. Southern Silesia has 15 establishments for the production of coke iron, with 55 furnaces, of which only

26 were in operation last year, and of these some were inactive during a part of the year; 5,272,464 centners were produced during the year, valued at 14,715,802 marks. The works employed 2,500 persons, of whom 567 were women. Only a few of the establishments for the production of charcoal iron were in operation in 1878, and these produced only 74,428 centners, valued at 280,469 marks. Upper Silesia has 20 rolling-mills, which last year turned out 4,552,404 centners of rolled iron and steel, valued at 30,779,336 marks, and employed 9,847 men and 291 women. The following were the prices, in marks and pfennigs, of Upper Silesia iron in 1878:

Production.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.
Coke pig.....	5. 25 to 5. 50	5. 25 to 5. 50	5. 20	5. 10
Charcoal pig, gray.....	7. 00 to 8. 80	7. 00 to 8. 80	7. 00 to 8. 80	7. 00 to 8. 80
Charcoal pig, white.....	6. 00 to 6. 80	6. 00 to 6. 80	6. 00 to 6. 80	6. 00 to 6. 80
Rolled bar-iron.....	10. 50 to 10. 75	10. 25 to 10. 50	10. 50 to 10. 75	10. 50
Wrought bar-iron.....	16. 00 to 17. 00	16. 00	16. 00	16. 00
Boiler-iron, coke.....	16. 50	16. 00 to 16. 50	16. 00	16. 00
Boiler-iron, charcoal.....	18. 50	18. 00 to 18. 50	18. 00	18. 00

#### ZINC PRODUCT.

Of zinc, 1,194,202 centners were produced in Upper Silesia in 1878, being 44,000 centners in excess of the product of any previous year. The prices, however, owing to a decreased demand, receded until, at the close of the year, they were lower than at any time since 1853, and the value of the product of 1878 was only 19,233,154 marks, while that of 1877, although 44,000 centners less, brought 21,156,154 marks. The number of zinc works in operation was 27, employing 4,800 workmen. Of zinc white, 18,636 centners were manufactured, worth 325,800 marks; and of sheet zinc, 376,539 centners, worth 6,853,100 marks.

#### MACHINERY AND AGRICULTURAL IMPLEMENTS.

The machinery exhibition of 1878 was unsatisfactory to the exhibitors, who numbered upward of 200, while that of 1879 showed a still greater falling off in the sales. The prospects for the immediate future are not encouraging either for the dealers in or the manufacturers of agricultural machinery.

#### TOBACCO PRODUCT.

In 1878 12,133 centners of tobacco were produced in Silesia against 8,779 centners in the previous year. Prices varied greatly, the product of the neighborhood of Ratibor, near the southeastern extremity of the province, bringing 29 marks per centner, while that of Oels, a few miles northeast of Breslau, brought only 16.60. The average price for the entire crop was 22 marks per centner; that of 1877 brought 21.40.

#### FLAX PRODUCT AND LINEN GOODS MANUFACTURE.

The cultivation of flax has for some years fallen off in the province, partly owing to the exhaustion of the soil in some localities and partly to the fact that the low prices have not been sufficient remuneration for the labor requisite in the cultivation and treatment of this plant.

The demand for linen goods was greatly diminished in 1878, and the prices fell accordingly. Half linen fabrics were in greater demand, but



not equal to the capacity of the manufactories, and the prices ruling at the beginning of the year were not sustained. The export of this species of goods to America has considerably increased during the last few months.

#### COTTON MANUFACTURES.

The manufacture of chenille and other cotton shawls has been pretty brisk for some months, an increased demand from the United States being one of the causes. In other cotton goods prices receded during the year; fabrics costing 25½ pfennigs per meter in January fell to 23½ by December, and fabrics costing 21½ pfennigs fell to 19½.

#### WOOLEN MANUFACTURES.

The woolen manufacture in the province is at a low ebb. One manufacturer in this city reports that his establishment is kept open solely because he wishes to keep his operatives employed, and that he pays the following wages: Foremen, 4 marks per day; assistants, 2 marks; girls, 1 mark. A journeyman cloth-weaver earns from 9 to 10 marks per week. Another establishment in Southern Silesia reports constantly falling prices with decreased orders for its fabrics. It employs 80 male and 300 female operatives, of whom the former earn 7½ to 15 marks per week and the latter 4 to 12 marks. Only two small shipments of woolen goods have been sent from the province of Silesia to the United States in the last 12 months.

#### MISCELLANEOUS.

*Distilleries.*—The number of distilleries in operation in the province during the last year was 1,117; of this number 331 used principally grain for distilling, 648 mainly potatoes, and the remainder apples, sugar-beets, molasses, wine lees, grape husks, &c. These distilleries used the following amount of materials: 4,303,000 hectoliters of potatoes, 688,200 hectoliters of grain, 176,000 hectoliters of molasses, 1,530 hectoliters of starch, 250 hectoliters of sugar-beets, and 870 hectoliters of wine lees, &c. The distilleries paid taxes to the amount of 6,628,766 marks.

*Breweries.*—The number of breweries in operation during the year was 1,021, consuming 625,923 centners of grain and 1,226 centners of malt surrogates, and producing 1,953,397 hectoliters of beer. The breweries paid taxes to the amount of 1,497,456 marks.

*Sugar factories.*—Forty-seven sugar factories in the province used in the period from September 1, 1877, to August 31, 1878, 10,358,049 centners of sugar-beets.

*Street railways.*—Breslau has four lines of street railways, belonging to a joint stock company founded in 1876, with a capital of 1,800,000 marks. The roads cost 33 marks per running meter (single track, with turnouts), and their entire length is 20,308 meters. The company now owns 32 cars and 143 horses, of the Danish breed. Number of passengers carried in 1878, 2,597,989; receipts, 312,423 marks; paid into the city treasury, 14,155 marks. The receipts for the first half of the present year were 130,134 marks in excess of those of the corresponding period of last year.

*Steam railways.*—There are in Silesia 2,594 kilometers of steam railways, belonging to 15 lines.

*Savings banks.*—The amount of deposits in the two savings institutions in this city at the close of 1878 was 13,375,106 marks, and the depositors numbered 60,436.

*Co-operative societies.*—The Breslau Consume-Verein, or co-operative association, has 29 supply stores, and at the close of 1878 numbered 16,869 members. The sales for the year amounted to 3,113,150 marks, which sum, after deducting all expenses, left 291,137 marks to be divided among the members.

*City government.*—For the expenses of the city government for the year ending March 31, 1880, the sum of 7,156,354 marks has been appropriated; of this amount 1,832,882 marks are for educational purposes.

#### PRICES OF PROVISIONS.

Of meats, beef and mutton remained steady at former prices during the last six months, while veal receded a trifle. Pork, bacon, and lard have had a downward tendency, pork rating at the end of June at 1.14 marks per kilogram, bacon at 1.64, and lard at 1.63.

The retail market prices in this city in September were as follows :

	Marks.
Beef.....per pound..	0.50 to 0.60
Pork.....do.....	.50 to 0.60
Mutton.....do.....	.50 to 0.55
Veal.....do.....	.50 to 0.60
Bacon.....do.....	.80 to 0.90
Lard.....do.....	.70 to 0.80
Geese.....each..	2.00 to 4.00
Ducks.....per pair..	2.00
Spring chickens.....do.....	.80 to 1.20
Pigeons.....do.....	.50 to 0.60
Rye bread.....5 pounds..	.40 to 0.45
Wheat flour.....per pound..	.15 to 0.17
Butter.....do.....	.80 to 1.00
Eggs.....per dozen..	.48
Milk.....per liter..	.10 to 0.20
Cream.....do.....	.50 to 0.60
Potatoes.....2 liters..	.08 to 0.10
Cauliflower.....per head..	.20 to 0.40
Apples.....per liter..	.10 to 0.15
Pears.....do.....	.08 to 0.10
Plums.....do.....	0.15
Green beans.....2 liters for..	.10 to 0.15
Eels.....per pound..	1.50 to 1.80
Pike.....do.....	0.80
Carp.....do.....	0.80
Salmon.....do.....	1.80
Live fowls:	
Chickens.....each..	1.00 to 1.80
Spring chickens.....per pair..	.80 to 1.20
Geese.....each..	2.00 to 5.00
Ducks.....per pair..	2.00 to 2.60
Pigeons.....do.....	.50 to 0.60
Partridges.....do.....	.80 to 1.50

#### RATES OF WAGES.

The following table gives the wages paid at present to mechanics and laborers in this city and some parts of the province :

Per day of ten hours :	Marks.
Masons and bricklayers.....	2.00 to 3.00
House carpenters.....	2.00 to 3.00
Coachmakers.....	2.50 to 3.00
Wheelwrights.....	2.00 to 2.50
Blacksmiths.....	1.80 to 3.00
Locksmiths.....	2.00 to 3.00
Brass founders.....	2.00 to 3.00
Wood and ivory turners.....	2.00 to 4.00

	Marks.
Decorative painters.....	2.50 to 3.00
Paper-hangers.....	2.00 to 2.80
Cabinet-makers.....	2.00 to 2.50
Tinsmiths.....	1.50 to 2.30
Coopers.....	1.50 to 2.00
Hatters.....	2.00 to 3.00
Shoemakers.....	1.50 to 2.50
Tailors.....	1.50 to 2.50
Saddlers.....	2.00 to 3.00
Glaziers.....	1.50 to 2.00
Brick and tile makers.....	3.00 to 5.00
Roofers.....	2.00 to 3.00
Brewery hands.....	2.00 to 2.50
Basket-makers.....	1.50 to 2.50
Cigar-makers.....	1.50 to 3.00
Chimney sweeps.....	1.50 to 2.00
Weavers and spinners, male.....	1.70 to 2.20
Weavers and spinners, female.....	1.20 to 1.80
Factory workmen.....	1.50 to 1.80
Railway employés.....	1.80 to 3.50
Droschky drivers.....	2.00 to 2.40
Street-car conductors.....	2.00 to 2.50
Iron founders and furnace men.....	1.80 to 2.60
Day laborers.....	1.30 to 2.00
Farm laborers, male.....	1.20 to 1.50
Farm laborers, female.....	.50 to .80
Per week of six days:	
Compositors.....	20.00
Pressmen.....	24.00
Feeders and assistants.....	10.00
Lithographers.....	18.00 to 20.00

The statement of the declared exports from this consular district for the year ending September 30, 1879, shows a large increase over the exports of the previous year.\*

HENRY DITHMAR.

UNITED STATES CONSULATE,  
Breslau, October 1, 1879.

### BRUNSWICK.

*Report, by Consul Fox, on the trade and industries of the consular district of Brunswick, embracing the cities of Brunswick, Magdeburg, Hanover, and Cassel.*

I had the honor on the 30th of September last to transmit the annual reports and returns of this consular district, showing the total amount of exports to have been \$675,635.54 against \$824,193.62 during the previous year, a decrease of \$148,558.08. I have now the honor to submit the following, in compliance with paragraph 380 of the consular regulations.

The consular district of Brunswick, embracing, as it does, the cities of Magdeburg, Hanover, and Cassel, may be taken as an index of the commercial and manufacturing interests of Inland Germany.

### MAGDEBURG.

This most important commercial point in this district is a large railway center, and is favored with a water route to the sea. The river

\* For statement showing the declared exports from Breslau to the United States, see table in Secretary's Letter, vol. I, page 99.

Elbe plays an important part in the commerce of this city, and in 1874 was greatly improved by the introduction of chain-steamboats, in the bettering of the harbors and general renovation and correction of the stream; the amount spent upon this work, not including a vast deal of private capital employed, was 8,400,000 marks. In 1874, the year in which the improvements were made, the carriage per river, by the United Hamburg-Magdeburg Steamboat Company, was 2,486,927 centners; in 1878, 5,669,073 centners, or an increase of 3,182,146 centners.

About one-half of the exports from this district to the United States goes from Magdeburg, the chief items being chemicals, chicory, and beet-sugar. In the sugar campaign of 1877-78 there were in operation in the province of Saxony 140 manufactories working 39,350,016 centners beets, which paid—

	Marks.
Tax .....	65, 455, 491
Import duty .....	2, 369, 082
	<hr/>
	67, 824, 573
Less export drawback .....	17, 855, 173
	<hr/>
Total .....	49, 969, 400

I am as yet unable to give any statistics concerning the campaign of 1878-79.

The trade in chemicals may be stated to have been fair; the export to the United States has diminished.

#### HANOVER.

This city, the next point in importance to Magdeburg, is also a large railway center, but a short distance from the seaboard, and the chief city in one of the wealthiest Prussian provinces.

A late publication of the chamber of commerce for the year 1878 reports very unfavorably on the general condition of business; this unhealthy state of affairs is attributed in the main to the uncertainty which has existed in regard to the workings of the German trade and tariff policy, and especially the levying of new and extra duties is looked upon with disfavor. I quote from the report:

For the most part, the German industry is little served by having the German market protected solely for it; it has long since outgrown this necessity; it now needs and desires the open markets of the world, and to have that market as free as possible. Many branches wish not only no duty, but positively assert the same to be a dangerous step that will cause foreign countries to adopt contra measures injurious to Germany.

I have, however, received private letters from merchants, which assure me that the increase in the duty is not looked upon with disfavor; that the bad state of trade was due to overproduction and bad quality. It must, however, be borne in mind that the report was published for the year 1878, and the letters are of more recent date, and that the parties that wrote them are engaged in the manufacture of specialties.

Fully one-fourth of the invoices certified to at this consulate are from the city and province of Hanover, the chief articles being ultramarine, woolen yarns, and cotton velvets. Owing to extraordinary efforts on the part of the manufacturers, there has been considerable increase in the manufacture of ultramarine; Russia has become a buyer to a large extent, more than making up for the falling off of this trade with England, Norway, and Sweden. This article has had to contend with the fluctuating market, but as the raw material, such as coal, soda, and sulphur,

has also had the same tendency, the manufacturers have been at no material disadvantage. The amount manufactured was 31,400 centners, the amount of raw material used 65,000 centners.

Taking everything into consideration, the trade in woolen yarns has been very good. The principal manufactory of this article is located in Celle, province of Hanover; they manufacture chiefly for export, England, Russia, West Indies, South America, Turkey, and the United States taking large quantities of the production; the export to the United States, however, has largely fallen off during the past year.

The cotton-velvet trade has been very large. The "*Mechanische Weberei*," the leading manufactory in this branch, having largely increased their manufacturing capacity, have nevertheless been unable to fill orders, and were therefore compelled to employ English spindles in order to meet their requirements; there was, however, no profit in this transaction, owing to the high import duty. I herewith append a tabular statement of the business of this large establishment for the year 1862, and from the year 1871 to 1878, inclusive.

Years.	Males employed.	Females employed.	Total.	Wages paid.	Value of goods sold.
				<i>Marks.</i>	<i>Marks.</i>
1878	976	825	1,801	1,361,329	4,765,000
1877	905	745	1,650	1,346,105	5,438,000
1876	764	588	1,353	1,058,732	4,380,000
1875	802	596	1,398	1,078,831	4,226,000
1874	778	569	1,377	1,068,000	3,978,000
1873	790	540	1,330	1,023,000	3,978,000
1872	820	530	1,350	975,000	3,981,000
1871	860	480	1,340	919,200	3,982,000
1862	820	460	1,280	580,143	2,696,000

I would further add that Hanover is one of the most important horse markets in Europe. Very fine animals are bred in the province, and large importations are made from Northern Germany, Russia, Denmark, and Austria. There is also in Hanover a triennial linen and a biennial leather market. Statements, marked A and B, respectively, are hereto attached, showing the amount of business transacted in 1878.

#### CASSEL.

The state of trade in Cassel partakes of the same general nature as the forementioned cities. There are but a few shippers there having invoices certified to at this consulate, the articles imported being China, glassware (lamp-chimneys, &c.), and small hardware (picture-nails, &c.). These articles show a large increase.

#### BRUNSWICK.

So far as its commercial relations with America are concerned, Brunswick is by far the least important of the four cities referred to. The duchy, however, is noted for the fertility of its soil, the wealth of its peasantry, and the flourishing condition of its manufactures, especially the beet-sugar industry, which has reached a high standard. It being the foundation of an extensive commerce and a large inducer to and

promoter of agriculture, and employing, as it does, such a vast amount of capital and labor, I think a word in relation to its status in Brunswick is pertinent.

#### BET-SUGAR INDUSTRY.

In the campaign of 1878-'79 there were at work 29 beet-sugar factories, employing about 4,000 hands, men, women, and boys, and consuming about 4,000,000 metercentners of raw beets. These were grown on 50,000 morgen of land (five-eighths acre), and produced 400,000 metercentners of sugar, worth 24,000,000 marks. The soil in which the beets are raised is so treated that generally speaking they are planted for two years successively; then follow wheat, potatoes, &c. It being necessary to hoe the beets a great deal, the culture produces a loose soil, free from weeds. It is therefore self-evident that the grain does better in such soils than in others where no beets are planted. The rent of one morgen of land costs, say, 60 marks; working, manuring, and seed, 75 marks; interest and tax, 10 marks; total, 145 marks; so that by an average crop of 75 metercentners beets to the morgen, at 2 marks per metercentner, the producer has no considerable direct gain. The peasants and renters of estates have, however, in many instances, formed associations, and have erected sugar factories and operated the same on their own account, obtaining generally a good profit therefrom; for instance, there are factories that have in the last ten years returned dividends of 50 per cent. and even 100 per cent. per annum. To produce one metercentner sugar requires 10.5 metercentners beets. Calculate—

	Marks.
Beets, 10.5, at 2 marks .....	21.00
Duty, 10.5, at 1.60 marks .....	16.80
Cost of manufacture, 10.5, at 1.60 marks .....	16.80
Total .....	54.60

o that even at the low price which manufactured beet-sugar has commanded in this campaign (60 marks per metercentner), a factory which cost 500,000 marks to build and equip, which would work 150,000 metercentners beets, would have a clear gain of 81,000 marks, or 16 per cent.\* It is a notable fact that in twenty years no raw-beet sugar factory in this duchy has had to suspend operations owing to the business being unprofitable; that is to say, if the beet crop is a success, the sugar manufacture will be also. It is customary for the stockholders to purchase the residue of the beets for a nominal sum, in some instances receiving the same gratis; this is used for fodder, giving in the end a good manure, so necessary to the proper cultivation of the beets. The molasses was formerly manufactured into alcohol, but now is reclaimed to sugar to a great extent through the processes of elusion, osmose, &c. The raw sugar is taken principally by the Magdeburg and Brunswick refineries; part is exported, on which a duty drawback is allowed. In London it competes with the same sugars from Bohemia, France, and Belgium. The freight to Hamburg or Bremen is about 1.30 to 1.40 marks per metercentner; to London 1.80 to 1.90 marks per metercentner. The six refineries in the duchy, five in the city of Brunswick, one near the city of Helmstedt, refine about 250,000 metercentners sugar. Loaf sugar is mostly manufactured.

The Brunswick Chamber of Commerce has issued no report on the state of trade since 1877; one is now in the course of preparation, but will in all probability not appear until the end of March next; I am,

\* Calculation made in round numbers.

therefore, without data and unable to give statistics as I should like. I am informed that in Prussia the collection and publication of statistics is obligatory, but no law to that effect exists in this duchy.

The kid-glove industry is also largely represented in this district. The principal manufacturers are in Halberstadt and Osterwick, on the Harz. The export in this branch has increased considerably.

Inclosed I beg to transmit a statement, marked C, showing the amount of importations of the leading articles into the cities of Magdeburg, Hanover, and Cassel for the year 1878.

WILLIAMS C. FOX.

UNITED STATES CONSULATE,  
Brunswick, December 9, 1879.

A.—Report of the business transacted at the triennial linen and drilling markets in Hanover, for the year 1878.

Description.	March 4, 5, 6.	July 29, 30, 31.	November 25, 26, 27.
Bleached linen:			
Offered.....pieces.....	203	221	257
Sold.....do.....	114	106	64
Unbleached linen:			
Offered.....pieces.....	14	6	4
Sold.....do.....	9	6	1
Colored spun linen:			
Offered.....pieces.....	6	6	3
Sold.....do.....	2	4	1
Printed linen:			
Offered.....pieces.....	38	14	17
Sold.....do.....	6	5	1
Bleached drilling:			
Offered.....pieces.....	96	74	108
Sold.....do.....	46	31	20
Unbleached drilling:			
Offered.....pieces.....	3	2	.....
Sold.....do.....	1	2	.....
Table linen:			
Offered.....pieces.....	177	144	12
Sold.....do.....	38	61	8
Pocket-handkerchiefs:			
Offered.....dozen.....	37	37	35
Sold.....do.....	14	11	15
Appraised value in marks:			
Offered.....	10,400	10,700	11,500
Sold.....	5,400	5,350	3,200

B.—Report of the business transacted at the biennial leather markets in Hanover, for the years 1877, 1878.

Description.	February 6, 7, 8.	August 7, 8, 9.
Number of sellers:		
1878.....	441	419
1877.....	437	474
Tanned leather brought into market:		
1878.....centners, lbs.....	5,381 00	5,637 50
1877.....do.....	6,283 00	6,742 50
Russian sole leather brought into market:		
1878.....centners, lbs.....	496 00	420 50
1877.....do.....	326 50	397 50

*B.—Report of the business transacted at the biennial leather markets in Hanover, for the years 1877, 1878—Continued.*

Description.	February, 6, 7, 8.	August 7, 8, 9.
Sheep-skins brought into market:		
1878.....centners, lbs..	634 50	525 00
1877.....do.....	514 50	694 00
Patent leather brought into market:		
1878.....centner, lbs..	318 50	340 50
1877.....do.....	411 00	358 00
Total brought into market:		
1878.....centners, lbs..	6, 890 00	6, 943 50
1877.....do.....	7, 517 00	8, 192 00
Domestic skins:		
1878.....centners..	208	111½
1877.....do.....	334	250

*C.—Report of the principal importations into the cities of Magdeburg, Hanover, and Cassel, for the year 1878.*

Articles.	Magdeburg.	Hanover.	Cassel.	Total.
Chemicals, drugs, dyes, &c.....centners..	7, 091	11, 891	5, 553	24, 535
China, glass and earthenware.....do.....		1, 741	2, 143	3, 884
Coffee and cocoa.....do.....	68, 799	41, 531	18, 229	128, 559
Cotton and cotton mixed goods.....do.....	4, 907	11, 909		16, 816
Feathers.....do.....		1, 124		1, 124
Foreign and domestic woods and wooden-ware.....do.....		688	424	1, 112
Foreign fruits, fresh and dried.....do.....	24, 191	9, 001	950	34, 142
Gutta percha.....do.....		664		664
Herring.....casks..	48, 294	5, 435	2, 127	55, 856
Jute yarn.....centners..			285	285
Leather and skins.....do.....	9, 176	2, 346	164	11, 686
Linen and linen mixed goods.....do.....	10, 862	214	890	11, 966
Liquors, wines, &c.....do.....	12, 942	23, 418	3, 566	39, 926
Metals, metal-ware, machinery.....do.....	5, 779	4, 885	1, 194	11, 358
Musical and scientific instruments.....do.....		88		88
Oils.....do.....	70, 722	21, 283	9, 646	101, 651
Paper-hangings.....do.....		52		52
Prepared meats and meat extract.....do.....		3, 348	2, 129	5, 477
Provisions.....do.....		5, 045	620	5, 665
Rice.....do.....	30, 377	15, 699	11, 644	57, 720
Seeds.....do.....		366		366
Silk.....do.....		59		59
Spices.....do.....	3, 724	2, 405	943	7, 072
Sugar, refined.....do.....	8	530		538
Sirap and molaasses.....do.....	15, 018	1, 385		17, 303
Tallow.....do.....	599		111	710
Tea.....do.....		552		552
Tobacco and cigars.....do.....	28, 917	6, 803	23, 756	59, 476
Wool and woolen mixed goods.....do.....	1, 845	1, 727	106	3, 678
Total.....centners..	295, 857	168, 254	82, 353	546, 464
Herring.....casks..	48, 294	5, 435	2, 127	55, 856

## CHEMNITZ.

*Report, by Consul Griggs, on the export trade of Chemnitz to the United States, for the year ending September 30, 1879.*

The declared value of the exports from this consular district to the United States during the year ending September 30, 1879, was \$5,070,478.34, an increase of \$462,911.41 over the previous year. The items which contributed principally to this result were the following:

Articles.	Value in 1879.	Increase over 1878.
Damasks.....	\$91, 391 62	\$7, 960 23
Dress goods.....	246, 218 03	106, 325 20
Dress trimmings, silk.....	589, 343 86	81, 581 14
Gloves, cotton.....	1, 057, 006 30	177, 483 24
Gloves, silk.....	50, 636 74	24, 207 07
Hosiery, cotton.....	2, 705, 174 90	134, 288 80



As times improve in the United States the demand for the better grades of goods steadily increases; therefore, it is to the quality more than to the quantity of the articles exported that this district is indebted for the large increase in the value of its foreign trade in 1879. The demand for "lace-top" gloves and for certain kinds of fancy hosiery has been so great during the past year that purchasers have been unable to obtain such goods as fast as they wanted them. And now some of the glove manufacturers say that all the goods they can deliver for several months to come are engaged, notwithstanding the fall orders, properly speaking, have not yet been received. Although some branches of business are thus prospering, others are far from feeling the effect of American prosperity. Some manufacturers, notably those of embroidery, lace, dress goods, and kid gloves, have given up their trade with the United States entirely, owing to the business methods of competitors and consequent low prices. Many American firms now employ agents and furnish them with the means necessary to make such goods as they wish to import. In this way nearly all the dress trimmings, embroideries, and kid gloves which are now being exported to the United States from Saxony are manufactured by the importers themselves. As the salary or commission of an agent is in no case equal to the profits of a local manufacturer, goods thus produced and imported cost less than when purchased outright. Although this manner of doing business has undoubtedly invigorated the exportation of dress trimmings during the past year, and at least partially accounts for the increase of 26 per cent. in their declared value over 1878, still I am of the opinion that if our merchants continue to manufacture here the trimmings which they sell at home they will shortly injure this branch of business just as other importers, in a similar way, have already very nearly ruined Saxony's foreign trade in embroidery, lace, and kid gloves.

The value of the dress goods exported from this district to the United States in 1879 was 76 per cent. greater than in the previous year. As nearly all of said goods were *consigned* for sale, it is very probable that the increase mentioned was more due to the methods than to the requirements of business. In this connection I might add that consigning goods has greatly injured many branches of the export trade of Germany. Such goods are not only generally forced upon our market almost regardless of the question of demand, but they are usually invoiced at low figures, so that they shall pay as little duty as possible. Of "*consignments*" it may therefore be said that not only do they affect the revenues of our government, but they also unsettle trade and make legitimate competition impossible.

To briefly state the business outlook in this district, it may be said that the hosiery and glove manufacturers have plenty to do, their orders for the higher priced goods being unusually large; business with other exporters is about the same as last year; wages have slightly increased, crops are good, and, to speak generally, trade is more active than it has been at any other time since 1873, and business men appear to be exceedingly hopeful for the future.

N. K. GRIGGS.

UNITED STATES CONSULATE,  
Chemnitz, September 30, 1879.

## COLOGNE.

*Report, by Consul Bullock, on the commerce and industries of Cologne, for the year ending September 30, 1879.*

## THE TRADE OUTLOOK BRIGHTENING.

From the annual and supplementary reports of the chambers of commerce in the Rhine province, it appears that trade and industry in this district have shared in the general depression that has continued to exist throughout Germany during the past year.

The revival of business that has been so long waited for and so confidently prophesied has not yet been realized, and, aside from some recent indications of increased activity in the iron industry, the outlook for business at the present time is not as reassuring as one might be led to believe from reading the commercial reports of the press. But while the returns of the chambers of commerce are not encouraging, they hold out the hope that the lowest depths of the depression from which trade and industry have been suffering for several years have been touched, and that the country is on the eve of experiencing a natural and healthy revival of prosperity.

The belief in an early and general revival of trade and industry is held by all classes, and intelligent and experienced observers, whose positions afford them opportunities for feeling the pulse of trade, say that during the past few months there have been indications of a general improvement, not isolated instances, which inspire the belief that the bottom has been reached, and that there will follow, although probably slowly, improvement in all departments of trade.

## AMERICAN TRADE IN GERMANY.

To the many able and exhaustive reports that have already been made to the department in regard to the question of extension of our commerce and the best means of introducing American products into Germany, I have nothing new at this time to add. There are some points, however, to which our consuls have generally, I believe, called attention in their reports, and to which, at the risk of repeating accepted trade axioms, I beg to refer again; for I believe that most of our consuls, of their personal knowledge, are aware of instances where the non-observance of these points has resulted in failures and losses. They may be briefly stated as follows:

Those manufacturers and exporters who are seeking trade in the German markets should ascertain, first, whether there is a demand for their wares, or whether, by well-directed and persistent efforts, a demand can be created, and, secondly, they should make allowance for the doubts and prejudices of those with whom they have to deal, and, thirdly, they should have the articles they wish to introduce in *thoroughly good and presentable condition*.

## CONDITION OF LABOR.

The tabulated statements (inclosure A) forwarded herewith will give one a very good conception of the general condition of the laboring classes in Rhenish Prussia. The wages of the workmen given in these tables were ascertained by careful inquiry among both employers and employed. The prices of the commodities enumerated were ascertained from the market reports and the retail dealers.

## IRON TRADE.

The following extracts translated from the annual report (issued in July, 1879) of the Chamber of Commerce of Essen, a chief center of the iron and mining industry, will afford a very good idea of the depression prevailing in the iron and coal trade, and of the condition of the iron workers and miners:

Five years' stagnation in the coal and iron trade has drawn all other trades of our district into distress. The restriction of business has touched all classes.

In consequence of reduced profits a great deal of property of traders and workmen who depended almost entirely upon the chief industry has been driven to the hammer of the public auctioneer, and in consequence of a great reduction of shares, dividends, profits, and other capital, many of the better situated class of proprietors and manufacturers have stinted their expenditures to the very lowest rate, until the wages of the workmen scarcely furnish the necessities of life.

Since 1878 earnings have grown worse from one week to the other; the workman has been obliged to get down a step lower at the end of every quarter, owing to the continuous reduction of wages, and sometimes there has been a complete standstill of work.

After the sudden fall of our industrial prices in 1873 and 1874, the year 1875 brought us many complaints, to the effect that the reduced wages of our miners—amounting to 3.12 marks—had resulted in many privations, compared to the wages of 1873, say from 3.95 to 4 marks. Yet wages went on declining until towards the end of 1878 the average pay of our miners at the most was from 2.50 to 2.80 marks per shift, and for the factory men from 2.80 to 3 marks. Added to this the *dues* and *taxes* weighed heavily on the workmen.

The miner pays on an average 6 marks for class taxes due to the Imperial Government. Moreover, in several communities of our district the communal taxes amount to 420 per cent. of the class tax or government tax. One parish, for instance, has to pay as high as 640 per cent., including school dues. A miner of that parish has to pay every month about 3.70 marks for taxes and dues. He pays for every shift work—

Of course his expenses tell for every day of the year (*Kalendertag*), whereas his wages count by the working day, amounting upon an average only to 1.70 or 1.80 marks per calendar day.

The statistics of our district of the year 1878 show that every miner has to work on the average for 1.6 members of the family. It is clear that 1.70 or 1.80 marks are not sufficient for nourishment and clothes of a larger family, if the children are really to be brought up to be healthy and well-schooled citizens of the empire. Yet our workmen, and especially our miners, are well aware of the fact that under the prevailing circumstances higher wages cannot be paid.

GEO. C. BULLOCK.

UNITED STATES CONSULATE,  
Cologne, November 13, 1879.

A.—Table showing wages and prices of victuals for Cologne, 1879.

HANDICRAFTSMEN.		Per day.
Bricklayers .....	\$0	71
Masons .....		71
Carpenters and joiners .....		71 to \$0 78
Gasfitters .....		71
Painters .....		77
Plasterers .....		83
Plumbers .....		71
FACTORY WORKMEN.		
Blacksmiths .....	\$0	66 to \$0 76
Cabinetmakers .....		83
Saddlers .....		71 to 75
Tinsmiths .....		71
Laborers .....		38 to 57
Founders and molders .....		71 to 83
Smiths, locksmiths, and turners .....		66 to 76
Boiler-makers .....		69 to 78
Engine-fitters .....		71 to 90
Apprentices .....		29 to 48
Average per head and per day .....		60 to 64

## VICTUALS.

Per pound avoirdupois.

Bread: Black .....	\$0 02	
Brown .....	03	
White .....	04	
Beef: With bones .....	15 to	\$6 17
Without bones .....	19	
Veal .....	17	
Mutton .....	17	
Pork: With bones .....	14 to	18
Without bones .....	20	
Lard .....	20	
Butter .....	24	
Butter, better quality .....	26	
Cheese, Dutch .....	14	
Coffee .....	26	
Coffee, better quality .....	35	
Sugar .....	10	
Potatoes .....	01 to	1 1/2

*Statement showing the value of declared exports from the consular district of Cologne to the United States, during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ended—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Books, stationery .....	\$1,259 02	\$1,540 57	\$2,222 99	\$1,858 85	\$6,381 43
Cologne water .....	3,197 05	3,128 98	1,675 75	3,538 82	11,540 60
Calf-skins and hides .....	3,583 38		7,585 53	8,090 33	19,859 24
Dyes, colors, and paints .....	16,908 70	16,947 49	16,965 48	18,745 23	69,586 90
Fringes, silk and beaded .....				6,929 87	6,929 87
Iron (spiegel) .....	103,772 46	80,919 13	78,622 62	104,615 94	368,930 15
Iron, old rails and scrap .....				53,589 55	53,589 55
Mineral water .....	1,713 60	3,798 95	46,213 17	47,495 51	99,221 23
Porcelain earthenware .....				1,026 01	1,026 01
Ribbons and velvets .....	47,542 00	68,217 46	93,950 06	135,416 28	345,134 80
Steel, manufactured .....	9,073 75	9,498 58	6,709 69	7,908 85	33,690 87
Sugar and sirup (grape) .....	10,182 55	5,860 08	8,578 23	9,139 20	33,760 01
Sundries .....	8,969 66	15,603 63	13,846 30	11,669 67	50,139 26
Wines .....	16,124 26	6,247 85	13,131 41	7,193 07	42,696 59
Total in United States gold .....	222,346 43	211,762 67	290,480 23	422,496 68	1,147,086 01
Total for preceding year .....	201,655 48	151,379 24	238,608 11	318,769 31	910,412 14
Increase .....	20,690 95	60,383 43	51,872 12	103,727 37	236,673 87

## CREFELD.

*Report, with accompanying tables, by Commercial Agent Harte, on the silk and velvet industry of Crefeld for 1878 and 1879.*

Since my last report on trade and commerce, September 30, 1878, I have to submit that there has been greater activity among the manufacturers of this agency.

## SILK GOODS.

Besides satin, which is one of the principal articles produced here, plain and fancy goods for trimming purposes have been made to a large extent. The demand for tie and scarf goods has been very great, and the manufacture of fancy goods increases from year to year. Satins have been in very great request, but owing to the continuous decline of prices of silk during nearly the whole time, and very great competition, the prices realized left but a very small margin.

Regarding umbrella goods, manufacturers have been well under contract up to the end of 1878, a great part of the production consisting of cotton-shot silks, which at the principal places of consumption have nearly superseded cheap "all-silk" goods. In all-silk the demand was only for guaranteed qualities of superior make. At present it seems that buyers begin to prefer "all-silk" of middle qualities to "cotton-shot." Regarding "all-silk" dress goods, the consumption has been very small, and the little demand has been for inferior grades in black and colors.

#### VELVETS.

My last report intimated that there was every chance of a better future for this article, and the result has proved that anticipation correct, although the improvement has been a very slow one, but in comparison with the condition of this article from 1872-'77, which were very unfavorable years to this staple, there is decidedly a reaction in its favor. The first impulse came from Paris, where velvet came again in fashion, particularly fancy velvets, so-called Pekins (striped velvets with gauze and satin or faille), and the demand in September and October was greater than the possible supply, and embossed and pressed velvets were taken instead.

As in 1877, the demand for very low qualities of black and colored millinery velvets gave occupation to the greater part of the looms in this district. The production was about equal to the demand, at all events not much in excess of it, but nevertheless competition was so keen that there was very little profit left to the manufacturer. This could only be explained by the bad state of commerce generally in all European countries, which could not fail to influence the prices for staple goods at the great centers, for better and best qualities for trimming; ladies' mantles and coat collars did not revive. The disastrous financial situation in England, following the failure of the Glasgow Bank, had a very adverse influence on the English market, which is always of great importance to this district.

Again, in velvets, the manufacture of fancy goods has greatly increased.

#### VELVET RIBBONS.

These were entirely neglected by the ruling fashion, and the production was in consequence greatly reduced; the only kind in demand were black and colored velvet ribbons with satin back, made on hand-loom for the French market.

I beg to submit to you a statistical statement concerning the velvet and silk industry of the district of Crefeld from the year 1876 to 1878. A great many of the looms mentioned therein are in the environs of Crefeld, but are employed on the account of Crefeld manufacturers. The sales do not include any goods bought by Crefeld merchants; they only represent the amounts of goods of their own production.

I also inclose a statement of the average prices of raw silk for the year 1878 and the first nine months of the year 1879.

In regard to the prices of raw silk for the year 1878, it may be observed that there has been a great advance in raw silk in the months of May and June, and that since June there has been a continuous decline.

The exports to the United States from this district have greatly increased. This is due not only to the better condition of the American

markets, but also greatly to the fact that the demand from England has fallen off very considerably.

I herewith give a statement of exports to the United States from this district of manufactured silk goods and silk goods mixed with cotton, for the years 1875, 1876, 1877, and 1878, and the first nine months of 1879. (Inclosure No. 2.) From this statement it appears that the export of these goods for the nine months of 1879 is already greatly in excess of the export for the whole year 1878.

At the present moment the demand for staple goods, such as plain velvets and plain satins, is very slight, and manufacturers begin to reduce their production, whereas fancy velvets, striped, and of more elaborate designs, as well as striped satins, remain in very good request from all quarters.

This district still suffers from the absence of all animation in the English markets.

#### THE NEW TARIFF.

The new customs tariff of the German Empire affects the industry of this district as far as concerns the raised duties on cotton yarn, "all silk," and "cotton-shot silk" piece-goods. According to the old tariff there was a universal duty of 12 marks per 100 kilograms for "all-counts" single and two-fold yarns in the gray state, whereas, according to the new tariff, the rates of duties will be:

	Marks.
<b>Singles, gray, per 100 kilograms:</b>	
Up to No. 17 .....	12
No. 18 to No. 45 .....	18
No. 46 to No. 60 .....	24
No. 61 to No. 78 .....	30
No. 79 .....	36
<b>Two-fold, gray, per 100 kilograms:</b>	
Up to No. 17 .....	15
No. 18 to No. 45 .....	21
No. 46 to No. 60 .....	27
No. 61 to No. 79 .....	33
No. 79 .....	39

The tariff concerning cotton yarn will take effect from January 1, 1880.

The Crefeld Chamber of Commerce has tried in vain to get these duties reduced, but none of the compromises proposed by it have found favor with the legislative bodies. As the consumption of cotton yarn becomes larger from year to year, the enhanced duties are of some slight consequence to this district.

Crefeld excels in the manufacture of "cotton-shot goods," such as plain satins and cotton-shot tie and scarf goods. It is in a favorable position in comparison to Lyons, not only because these articles are made here to perfection, but also on account of the difference in the prices it has to pay for the yarn, which is almost entirely of English production, while there is a heavy import duty on cotton yarn into France, and only a slight duty into Germany; therefore the raised duties for this material will put German manufacturers into a slightly less favorable position in foreign markets.

The import duty on "all-silk" and "cotton-shot silk" goods has been raised by the new tariff for "all-silk" goods from 240 to 600 marks per 100 kilograms; "cotton-shot silk" goods, 180 to 300 marks per 100 kilograms.

As Lyons exports a great deal of "all-silk" goods to Germany, the higher duty will enable German manufacturers to compete more successfully in the home markets.

BRET HARTE.

UNITED STATES COMMERCIAL AGENCY,  
Orefeld, September 30, 1879.

1.—Statistics of the velvet and silk industry of Orefeld.

A.—AVERAGE NUMBER OF LOOMS EMPLOYED DURING THE YEARS 1878, 1877, and 1876.

	1876.	1877.	1878.
Velvets.....number..	15, 808	14, 794	14, 506
Velvet ribbons.....do..	610	405	492
Piece-goods.....do..	12, 387	11, 567	13, 645
Silk ribbons.....do..	542	277	178
Total.....	29, 437	27, 043	28, 909

B.—SALES.

In Germany.....marks..	22, 163, 152	22, 249, 392	20, 599, 565
In England.....do..	26, 314, 726	20, 835, 703	23, 755, 875
In France.....do..	2, 508, 094	2, 478, 728	4, 122, 810
In other European countries.....do..	3, 940, 694	8, 596, 205	2, 582, 240
In non-European countries.....do..	10, 332, 884	9, 648, 421	13, 007, 250
Total.....	65, 258, 550	58, 278, 444	64, 067, 940

C.—CONSUMPTION OF RAW MATERIAL.

Raw silk.....kilograms..	305, 397	283, 065	312, 002
Chappe.....do..	154, 873	150, 598	175, 892
Cotton yarn.....do..	504, 461	526, 657	742, 543
Total.....	966, 231	970, 320	1, 230, 437

2.—Statement of exports to the United States from the consular district of Orefeld.

	Year 1876.	Year 1876.	Year 1877.	Year 1878.	Nine months 1879.
	Marks.	Marks.	Marks.	Marks.	Marks.
All-silk goods.....	1, 781, 948	1, 887, 584	1, 015, 076	764, 517	521, 570
Silk and cotton goods.....	2, 042, 491	2, 458, 504	3, 091, 498	3, 147, 861	3, 658, 098
Goods for buttons.....	120, 082	354, 338	383, 796	174, 659	81, 789
Velvets.....	2, 528, 758	2, 898, 184	2, 840, 897	4, 072, 249	4, 518, 693
Ribbons.....	169, 135	101, 618	96, 334	219, 977	224, 909
Velvet ribbons.....	47, 194	27, 061	100, 935	102, 577	33, 141
Total in marks.....	6, 674, 608	7, 717, 839	7, 528, 531	8, 481, 840	9, 037, 900
Total in dollars.....	\$1, 588, 556	\$1, 836, 845	\$1, 791, 790	\$2, 018, 677	\$2, 150, 906

## DANTZIC.

*Statement showing the imports at Dantzic for the year ending December, 1878.\**

Articles.	Quantity.	Value entered.	Whence imported.
Coffee .....	cwt. 41, 619	\$310, 430	No statistics published. The bulk of imports is from Great Britain. Coffee, tobacco, and spices come partly from Holland, Hamburg, and Bremen; machinery, iron and steel manufactures from Belgium; wine from France chiefly; petroleum, lard, bacon, and rosin from the United States; herrings from Holland, Scotland, and Norway; other articles from different European ports.
Cocoa .....	do. 672	9, 595	
Chicory and other surrogates .....	do. 32, 290	77, 200	
Tea .....	do. 654	21, 143	
Rice .....	do. 41, 618	133, 762	
Sugar, raw and refined .....	do. 14, 977	124, 381	
Sirup and molasses .....	do. 8, 235	30, 000	
Pepper and pimento .....	do. 12, 890	114, 680	
Cinnamon and other spices .....	do. 1, 903	26, 333	
Southern fruits and preserves .....	do. 16, 503	225, 000	
Tobacco and tobacco manufactures .....	do. 4, 251	55, 000	
Wine and must .....	do. 37, 389	500, 000	
Arrack, rum, and brandy .....	do. 9, 408	114, 405	
Beer .....	do. 5, 075	21, 667	
Honey .....	do. 2, 522	24, 024	
Meat and bacon .....	do. 9, 343	82, 310	
Lard .....	do. 53, 554	404, 619	
Herring .....	barrels. 99, 771	714, 300	
Salt .....	cwt. 342, 648	90, 000	
Sundry articles of consumption .....	do. 19, 418	123, 338	
Drugs, chemists', and dye wares .....	do. 216, 325	580, 000	
Oils, &c., olive .....	do. 7, 943	93, 761	
Linseed oil .....	do. 28, 068	200, 480	
Palm and cocoanut oil .....	do. 5, 774	55, 000	
Other oils .....	do. 4, 093	42, 500	
Tallow .....	do. 6, 361	53, 309	
Train oil .....	do. 5, 541	43, 333	
Other grease, soap, perfumes, candles, wax, cwt. ....	10, 167	14, 524	
Petroleum .....	cwt. 314, 852	805, 881	
Asphalt, tar and pitch, felt .....	do. 182, 552	257, 524	
Pig and old iron .....	do. 383, 332	255, 547	
Iron, forged and ruled, &c .....	do. 44, 285	80, 120	
Rails .....	do. 2, 581	4, 620	
Raw and cement steel, cast steel, iron and steel plates, wire, tins .....	cwt. 66, 247	213, 100	
Rough cast goods, iron and steel goods .....	do. 72, 996	286, 833	
Engines, boilers, anchors, chains .....	do. 86, 649	525, 120	
Lead and lead goods .....	do. 11, 556	60, 600	
Pewter and pewter goods .....	do. 2, 736	53, 300	
Spelter, spelter plates, and spelter goods .....	do. 639	3, 810	
Tin .....	do. 16, 207	96, 480	
Copper, copper wire, copper and brass foundry articles .....	cwt. 13, 496	253, 524	
Earths and ores, chalk and lime .....	do. 290, 620	112, 190	
Cement .....	do. 176, 368	105, 000	
Coals and coke .....	do. 4, 891, 553	711, 190	
Stones and stone wares .....	do. 144, 777	125, 340	
Bricks, clay pipes, and clay wares .....	do. 129, 830	49, 000	
Glass and glass wares .....	do. 1, 847	14, 240	
Non-European timber .....	do. 4, 821	13, 830	
Builders' timber .....	do. 35, 740	37, 524	
Coopers' and cabinetmakers' goods, furniture, carvers' goods .....	cwt. 38, 491	265, 285	
Raw cotton .....	do. 37, 028	483, 481	
Yarns, cotton and woolen, cotton and woolen goods, manufactures .....	cwt. 3, 729	141, 095	
Linen yarns and linen, sailcloth, &c .....	do. 5, 560	33, 571	
Ropemakers' wares .....	do. 1, 805	22, 381	
Flax, hemp, tow, oakum, jute .....	do. 553	3, 071	
Hides and skins .....	do. 19, 612	308, 214	
Rags .....	do. 2, 162	5, 920	
Paper and paper wares .....	do. 4, 148	35, 000	
Guano .....	do. 5, 565	14, 571	
Other articles not before mentioned .....	do. 22, 132	200, 952	
China .....	do. 275	4, 119	
Total .....		10, 377, 432	

\* Transmitted to the Department by the consul-general at Berlin.



Statement showing the exports from Dantzic for the year ending December, 1878.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Wheat..... tons.....	248, 133	\$12, 113, 309	No statistics obtainable. Wheat, barley, and pease are exported, principally to Great Britain, but also to Denmark, Sweden, Norway, Germany, Holland, and Belgium, as well as to Great Britain and France; spruce beer almost exclusively to Great Britain; oil and oil seeds to Holland and Belgium; other articles to German ports.
Rye..... do.....	30, 139	877, 857	
Barley..... do.....	16, 561	548, 095	
Oats..... do.....	274	8, 095	
Pease, beans, &c..... do.....	6, 003	184, 752	
Oil seeds..... do.....	8, 223	497, 381	
Other agricultural produce..... cwt.....	29, 089	29, 000	
Flour, starch, &c..... do.....	53, 473	209, 500	
Spruce beer..... gallons.....	65, 000	44, 190	
Molasses..... cwt.....	273, 006	325, 000	
Sundry articles of consumption..... do.....	9, 306	71, 475	
Timber and staves..... do.....	.....	2, 783, 095	
Iron and iron manufactures..... do.....	3, 487	52, 905	
Lead..... do.....	3, 282	17, 190	
Coopers' and turners' goods, wickerwork..... do.....	9, 456	38, 357	
Drugs..... do.....	4, 326	41, 904	
Rape oil..... do.....	77, 922	593, 700	
Oil-cakes..... do.....	37, 178	62, 000	
Bones..... do.....	3, 355	4, 000	
Rags..... do.....	10, 183	21, 666	
Shoddy..... do.....	6, 637	52, 143	
Tar, pitch, rosin, and felt..... do.....	4, 667	9, 762	
Paper and pasteboard..... do.....	2, 882	13, 048	
Cement..... do.....	.....	.....	
Other articles not particularly enumerated, cwt.....	28, 513	85, 238	
Total.....	.....	18, 684, 642	

Statement showing the navigation at the port of Dantzic for the year ending December 31, 1879.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Belgian.....	United States, Great Britain, France, Germany, Belgium, Holland, Denmark, Norway, Sweden, Russia.	3	3, 981	3	1, 125	6	5, 106
British.....		820	247, 490	161	29, 693	490	277, 183
Danish.....		32	15, 306	101	11, 725	133	27, 021
Dutch.....		21	11, 073	62	8, 744	83	19, 817
French.....		.....	.....	1	143	1	142
German.....		196	78, 250	657	162, 337	853	240, 587
Norwegian.....		28	8, 241	49	22, 263	77	30, 504
Russian.....		1	976	10	4, 202	11	5, 178
Swedish.....		24	14, 007	62	13, 202	86	27, 209
Total.....		634	379, 314	1, 106	253, 463	1, 740	632, 777

Flag.	To—	CLEARED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Belgian.....	United States, Great Britain, France, Germany, Belgium, Holland, Denmark, Norway, Sweden, Russia.	3	3, 981	3	1, 125	6	5, 106
British.....		832	250, 800	160	29, 520	492	280, 420
Danish.....		33	15, 296	104	11, 918	136	27, 214
Dutch.....		21	10, 700	60	8, 603	81	19, 303
French.....		.....	.....	1	142	1	142
German.....		196	77, 850	659	161, 561	854	239, 411
Norwegian.....		28	8, 241	51	21, 066	79	29, 307
Russian.....		1	976	9	3, 656	10	4, 632
Swedish.....		24	14, 007	61	12, 623	85	26, 630
Total.....		636	381, 951	1, 118	250, 213	1, 754	632, 164

## DRESDEN.

*Report, by Consul Mason, on the trade of Dresden with the United States for 1879.*

Agreeably to instructions contained in Consular Regulations, I have the honor to report that the commercial relations between the Kingdom of Saxony and the United States remain without material change since my last report. I think trade between the two countries promises to expand, as times are becoming easier in both countries, and may be influenced by the new tariff adopted by the German Empire.

The number of invoices authenticated at this consulate for the last four quarters, ending September 30, 1879, was 1,626, as against 1,211 for the twelve months preceding, and the value of goods exported aggregated \$962,966.29, as against \$721,402.02 for the twelve months preceding.

Referring to circular of State Department of date April 8, 1879, I would remark no meteorological observations are taken in this consular district.

JOS. T. MASON.

UNITED STATES CONSULATE,  
Dresden, October 6, 1879.

## GEESTEMÜNDE-BREMERHAVEN:

[Two reports.]

No. 1.—*Report, by Mr. Schoenle, commercial agent, on the commerce, navigation, and industries of Geestemünde for the years 1878 and 1879.*

In conformity with paragraph 380 of the Consular Regulations, I have the honor to submit a report respecting the trade and commerce at the port of Geestemünde for 1878 and a portion of 1879.

In presenting the tabulated reports of importation and exportation I beg to state that the trade at the port of Bremerhaven is included, whenever the same could not properly be kept separate. The statistics of the trade at the port of Bremerhaven, however, are compiled at the statistical bureau at Bremen, and the same are condensed into one table, as Bremerhaven is the seaport proper for Bremen and considered a quasi appendix to Bremen.

## IMPORTS.

The import of tobacco and petroleum exceeded the immediate demand in the first few months of this year, in consequence of the impending tariff law. Merchants being well aware that the Reichstag would pass laws laying heavy income duties on said articles, took advantage of this interval and imported extraordinary quantities, in order to anticipate the threatening tariff. Geestemünde and Bremerhaven being so-called *free ports*, lying outside of the German Zollverein, traders in petroleum were hurriedly building up sheds *within* the neighboring territory of the Zollverein, and transferred nearly the whole stock on hand, as well as the incoming petroleum, into the limits of the Zollverein, so that when the tariff on petroleum took effect, about the middle of July last, only a few scattering petroleum barrels were stored *outside* of the Zollverein. Traders in petroleum realized handsome profits by these speculative movements, as the price of this very petroleum, on which the income duty was *not* paid, rose immediately after the expiration of the *free* import of petroleum in proportion to the income duty.

This overimportation of tobacco and petroleum, however, unsettled business in these articles, and had the result that in the last four months of this year only very limited quantities of said articles were imported into the ports of Geestemünde and Bremerhaven.

At the present the import of *grain* is exceedingly large, because traders are anxious to increase their stock before the tariff on grain takes effect, January, 1880.

In the tables of the board of trade at Geestemünde, from which the following tabulated reports are compiled, only the weight but not the value of the importations and exportations is given.

*Statement showing the principal imports from the United States into the ports of Geestemünde and Bremerhaven for the years 1877 and 1878.*

Articles.	1877.		1878.	
	Geestemünde.	Bremerhaven.	Geestemünde.	Bremerhaven.
	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>	<i>Cwt.</i>
Petroleum .....	1,437,206	2,406,508	1,846,510	1,758,395
Cotton .....	15,339	509,862	36,925	832,295
Wool .....	6	48,275	4,788	93,586
Tobacco .....	1,279	118,835	11,914	204,990
Pickled pork and beef .....	302	2,699	1,823	9,886
Lard .....	7	18,386	3,785	15,719
Butter .....			216	10,082
Wood .....	30,201	46,751	28,204	64,530
Grain .....	393,842	358,735	423,499	484,756
Guano .....	12,840	34,477	4,000	206
Resin .....	379	28,262	528	13,854
Lubricating oil .....	2,073	2,146	4,824	3,186
Indian corn .....	115,506	58,634	63,265	157,689
Tallow .....		224	3,765	15,719
Total .....	2,018,980	3,630,804	2,430,606	3,664,893

*Petroleum.*—Petroleum is the leading article of American production imported into the port of Geestemünde. The following table shows the import of petroleum for the years 1877 and 1878:

Whence.	1877.	1878.
New York .....	barrels.. 322,180	306,088
Baltimore .....	do.. 192,854	148,317
Philadelphia .....	do.. 36,404	135,979
All others .....	do.. 7,609	
Total .....	559,047	590,384

The total number of barrels on hand at both ports of Geestemünde-Bremerhaven October 24, 1879, amounted to 344,336, against 300,308 barrels at the same period in the year 1878.

The import of petroleum into the ports of Geestemünde-Bremerhaven surpasses that of any of the other petroleum ports on the Continent, as will be seen by the following table:

## IMPORT.

Cities.	1874.	1875.	1876.	1877.	1878.
	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>
Geestemünde .....	810,496	1,042,587	969,971	1,463,264	1,165,746
Bremerhaven .....	659,233	722,168	601,209	772,167	834,510
Antwerp .....	253,439	154,871	125,411	810,601	245,757
Hamburg .....	184,617	152,945	154,814	207,841	218,901
Rotterdam .....	189,476	229,554	211,037	204,194	208,767
Stettin .....					

## PETROLEUM EXPORT IN TRANSIT.

	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>	<i>Barrels.</i>
Geestemünde .....	769,451	1,046,160	1,123,447	1,249,638	1,196,110
Bremerhaven .....					
Antwerp .....	676,250	732,026	677,476	730,815	762,272
Hamburg .....	265,815	169,963	139,609	260,866	278,995
Rotterdam .....	191,021	197,079	192,742	198,374	215,584
Stettin .....	185,868	216,161	214,595	213,931	200,843

## EXPORTS TO THE UNITED STATES.

The sudden rise of iron in the United States caused lately the exportation of German iron to the United States, and for the last few months the cargo of nearly every vessel, bound from Geestemünde and Bremerhaven to one of the seaports in the United States, consists principally of railroad iron, and especially rails, all manufactured in the establishment of Krupp, at Essen.

People here look with cheering confidence to the healthy and steady improvement of business in the United States, and are eagerly watching every single stage of the return of prosperity in all branches of American industry and commerce.

*Statement showing the principal articles of export from the port of Geestemünde to the United States for the years 1877 and 1878.*

<i>Articles.</i>	1877.	1878.
	<i>Cwt.</i>	<i>Cwt.</i>
Empty petroleum barrels, 115,471 .....	69,085	79,716
Clay .....	15,968	40,400
Fertilizing salts .....	19,200	42,000
Vinegar .....	3,976	
Salts .....	20,650	5,790
Total .....	128,879	158,906

It will be seen from the above table that the exportation to the United States is limited to very few articles.

The following table shows the import and export to and from the port of Geestemünde for the year 1878:

<i>Countries whence imported and whither exported.</i>	<i>Import.</i>	<i>Export.</i>	<i>Total.</i>
	<i>Cwt.</i>	<i>Cwt.</i>	
United States .....	2,527,984	176,706	
British America .....	7,255		
Central America .....	98,240		
South America .....	6,300	33,500	
West Indies .....	26,064	4,695	
Mexico .....	40,000		
East Indies .....	416,381		
Brazil .....		16,400	
Great Britain .....	483,110	35,229	
France .....	13,240		
Portugal .....	6,481	13,125	
Turkey .....	1,850	550	
Russia .....	1,092,315	80,420	
Roumania .....	50,000		
Sweden .....	41,920	10,607	
Norway .....	123,184	24,369	
Denmark .....	4,400		
Netherlands .....	1,970	19,624	
Prussia .....	130,518	157,988	
Mecklenburg .....		4,420	
Oldenburg .....	3,295	4,260	
Hamburg .....	2,475	37,460	
Lübeck .....		1,836	
Bremen .....	4,820	400	
Total 1878 .....	5,081,802	621,589	5,702,891
Total 1877 .....	4,596,584	574,939	5,141,523

The export in the year 1878 shows an increase over that in 1877 of 46,650 hundred weight.

#### MISCELLANEOUS.

**Wages.**—The continued stagnation of commercial affairs throughout Germany is still sensibly felt by the merchants and business men of Geestemünde and Bremerhaven. Wages of laborers, and especially dock-hands, however, are exceptionally high in this consular district, ranging from 85 cents to \$1 per day. People in Bremerhaven and Geestemünde are almost exclusively dependent on navigation, as, with the exception of ship-building, there is hardly any branch of industry of importance in both places.

**Fisheries.**—Geestermünde is one of the largest fish-markets in Germany. The port can be reached very easily by the numerous smacks fishing along the coast of the North Sea, and their cargoes find a ready market at any time of the year. During the year 1878 1,845 fishing boats brought into this port 2,169,000 pounds of fish, nearly all of which was sent into the interior. The value of this export in transit amounted to 740,000 marks.

#### WOOD TRADE.

The trade in this article is very considerable at this place and in the large Prussian town of Lehe, adjoining Bremerhaven. Building-timber is mostly imported from Sweden, Norway, Finland, and Russia, while cabinet-wood and dye-woods are almost exclusively imported from America. This trade is steadily increasing every year.

**Ship building.**—The general depression in all branches of industry and commerce for the last few years had reduced freights to such a degree that many ship-owners did not employ their vessels at all, or only at intervals. The consequence was that the once flourishing ship-building at Geestemünde and Bremerhaven is at the present time very dull. But very few ships are built. The ship-yards now confine themselves mostly to the repairing of vessels. There are six dry-docks at Geestemünde and Bremerhaven, all situated along the small river Geeste, which divides Bremerhaven from Geestemünde. Only 4 new vessels were built in these six yards during the year 1878, while 143 vessels were repaired during the same period. The "North German Lloyd" repairs its steamers in its own dry-dock.

WOLFGANG SCHOENLE.

UNITED STATES COMMERCIAL AGENCY,  
Geestemünde, November 10, 1879.

No. 2.—*American imports and import duties.*

[A report, by Commercial Agent Schoenle, of Geestemünde.]

The economical tenet that the consumer invariably pays the duty levied on articles of import, especially on food supplies, has met with an additional striking illustration and confirmation by the new German tariff on grain. Since the 1st day of January, 1880, the respective section of said tariff law whereby all sorts of grain imported into the German empire are subject to import duties, has taken effect. On account of the failure of the grain crop in Germany and neighboring countries, grain had a steady upward tendency since last fall, and rye, for instance, was quoted in this consular district a week before new year at 168 to 172 marks per 1,000 kilograms. As soon as the *dutiable* rye came into market, soon after new year, the price advanced to 178 to 182 marks, just the corresponding amount of import duty levied on rye (10 marks duty per 1,000 kilograms). Rye is a very important factor in the food supplies of the German people, and especially of the people in the northern part of Germany, as the bread in daily use among nearly all classes of the latter population is made either of coarse or sifted rye-flour. It may be safely asserted that since the time that import duties have been levied on all sorts of meat and breadstuffs, so extensively imported into Germany, the price of these necessities of life has increased in proportion to the respective import duties. The tabular statistics, however, show that the importation of the above-named articles has not decreased; on the contrary, a steady increase of their importation is noticeable. American pickled beef and pork have completely crowded the German out of the market, and at Hamburg, as well as at the ports of Geestemünde-Bremerhaven, butchers and dealers in meat were compelled to abandon that branch of business entirely. They could not stand competition with American packers any longer. The fact that Hamburg as well as Bremer vessels, plying between American and German ports, provide themselves with enough supplies of pickled beef and pork, and also flour and other provisions, at American seaports, so as to last them not only for their home, but also for their return voyage, proves beyond question that American pickled meats have put a complete stop to the once flourishing packing business at the German seaport cities.

American hams, bacon, lard, and butter enter extensively into competition with the respective German articles, and are steadily gaining headway over the latter. In course of last year there had been imported into the ports of Geestemünde-Bremerhaven 61,418 tubs of American butter. The import of this article has increased in the year 1879 more than six times as compared with the importation in 1878. Were it not for the prejudice which is still systematically and artificially raised against these articles the sale of the same would even be larger. There are a good many grocers in this consular district who are in the habit of selling American hams for Bohemian, and who deal out to their customers American bacon, lard, and butter, on the sly, as German articles. It is, however, the good quality and the comparative cheapness of these articles which always command a ready market. One may find American butter for sale in almost every grocery within this consular district, but the grocers are constantly taking care that their customers should not be aware that they are buying the American article.

Against the American canned meats the public mind is still more unfavorably impressed, as these meats have the effect of reducing the manufacture of sausages, which figure so largely upon German tables. But in spite of all the combined opposition of interested parties against

this wholesome American food, the importation of the same is constantly increasing, and it is only a question of time until the American canned corned beef will take the place of the German sausage to a certain extent, the former being more nourishing and wholesome than the latter.

#### PETTY SMUGGLING.

Aside from the above statements, it might not be out of place to call the attention of the Department to a system of petty smuggling, chiefly practiced by German-Americans. It is of frequent occurrence that barrels which, according to the bills of lading, should, for instance, contain nothing but flour, reach the ports of Geestemünde-Bremerhaven, intended for parties in the interior of Germany. The local forwarding and commission agents take charge of these consignments, and make their declarations at the custom-house in accordance with the bills of lading. Upon examination of such barrels, however, custom-house officers detect, very frequently, that small bags of coffee, tea, sugar, or hams, preserves, and even small packages of silk goods had been stuffed into them. Such barrels are immediately seized by the custom-house officers, and the agents are summoned to answer for making false and erroneous declarations. The cases are generally settled by adding three or four times the amount of the original duty on the smuggled articles, so that in almost every case the whole value of the smuggled article has to be paid to the government. It is evident that out of such proceedings considerable expenditures accrue to the receivers of the goods, and at the same time unnecessary delay is caused in forwarding the same to their destination. These malpractices are generally performed by people who are in the habit of sending to their friends or relatives some substantial Christmas or birthday presents. The additional articles are very likely intended to be an extra surprise to them. It is supposed that the former are ignorant of the German custom laws, and do not intend to violate them purposely. It may, however, be well for people in the United States to take notice that all consignments, destined to make direct entry into the German customs dominion (Zollgebiet), are minutely examined at the place of landing before they are permitted to enter the same, and that this kind of petty smuggling does not escape the vigilance of the German custom-house officers.

WOLFGANG SCHOENLE.

UNITED STATES CONSULAR AGENCY,  
*Geestemünde, January 16, 1880.*

*Statement showing the value of declared exports from Goestemünde-Bremerhaven to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Champagne .....	\$3,850	\$2,575	\$1,500	\$615	\$8,540
Codfish .....	378				378
Birds and animals .....	10,230	11,558	782	6,835	29,506
Sourkrout .....	240				240
Beer .....	20				20
Whisky .....	70				70
Lac spirits .....	72				72
Paints .....	712	725	395	396	2,228
Red wine .....	238				238
Straw hats .....	713	4,396			5,109
Linen goods .....	86				86
Bituminous coal .....		201			201
Swiss clocks .....			45		45
Scrubs and wooden shoes .....			555		555
Feather beds .....			108		108
Oil paintings .....			23		23
Fertilizing salts .....				472	472
Hardware and clay goods .....				315	315
Scrubbers .....				165	165
Wearing apparel .....				240	240
Total in United States gold .....	16,709	19,456	3,408	9,038	48,610

## HAMBURG.

*Statements prepared by Consul Scroggs, showing the commerce of Hamburg for the years 1877 and 1878.*

## IMPORTS BY ARTICLES.

[Values in United States gold.]

Articles.	1877.		1878.	
	Value.	Per cent.	Value.	Per cent.
Coffee .....	\$37,589,251 10	8.89	\$31,276,163 10	7.68
Tea .....	1,495,320 70	0.35	1,065,685 50	0.26
Cocoa .....	1,186,787 00	0.28	1,011,519 00	0.25
Sugar, raw .....	13,213,105 50	3.13	14,544,782 10	3.57
Sugar, refined .....	1,745,265 90	0.41	2,232,116 20	0.55
Sirup .....	745,385 10	0.18	656,156 50	0.16
Tobacco and tobacco stems .....	9,032,609 30	2.14	8,802,163 30	2.16
Cigars .....	3,050,165 20	0.72	3,093,217 80	0.74
Rice .....	2,211,479 30	0.52	2,299,308 50	0.56
Pepper .....	315,906 90	0.07	374,481 10	0.09
Pimento .....	203,323 40	0.05	94,007 60	0.02
Cassia lignea .....	30,530 60	0.01	232,352 30	0.06
Oranges and lemons .....	558,069 50	0.13	545,493 60	0.13
Almonds .....	713,716 80	0.17	567,718 10	0.14
Raisins .....	634,148 60	0.15	410,916 50	0.10
Currents .....	401,422 70	0.09	503,179 60	0.12
Wine .....	4,336,866 90	1.03	4,158,752 50	1.02
Alcohol .....	4,164,462 10	0.98	3,649,299 20	0.90
Other spirits .....	1,442,884 50	0.34	1,563,333 90	0.38
Wheat .....	5,284,663 90	1.25	3,154,247 30	0.77
Rye .....	1,484,315 60	0.35	1,524,766 00	0.37
Barley .....	4,266,675 00	1.01	5,242,128 50	1.30
Oats and other grain .....	2,151,470 00	0.51	1,904,452 20	0.47
Legumes .....	546,288 50	0.13	499,616 70	0.12
Flour and meal .....	6,846,729 30	1.62	6,658,342 50	1.64
Herrings .....	1,426,424 40	0.34	1,277,474 50	0.31
Live cattle and meats .....	18,024,370 70	4.28	18,699,405 30	4.59
Butter .....	6,640,397 50	1.57	6,360,345 10	1.56
Cheese .....	1,046,812 10	0.25	988,540 10	0.24
Other articles of food .....	23,565,681 10	5.57	22,446,068 00	5.51
Cotton yarn .....	12,574,101 70	2.95	11,998,379 70	2.95



*Statements showing the commerce of Hamburg, &c.—Continued.*

## IMPORTS BY ARTICLES—Continued.

Articles.	1877.		1878.	
	Value.	Per cent.	Value.	Per cent.
Woolen and half-woolen yarn .....	\$9,833,341 36	2.32	\$10,446,412 60	2.56
Linen thread .....	1,545,098 40	0.37	1,654,559 80	0.41
Raw and spun silk .....	1,168,013 60	0.28	693,943 70	0.17
Cotton .....	6,285,140 60	1.48	5,598,861 90	1.38
Sheep's wool .....	10,974,222 80	2.59	12,005,876 70	2.96
Flax, hemp, and oakum .....	857,221 30	0.20	778,198 10	0.19
Rags .....	661,573 40	0.16	666,416 70	0.16
Hides .....	5,057,411 90	1.20	5,987,119 40	1.46
Skins .....	5,688,302 30	1.34	3,509,074 40	0.86
Sole and other leather .....	7,592,254 70	1.80	8,171,239 70	2.01
Horse-hair .....	543,477 80	0.13	476,121 40	0.12
Bristles .....	1,544,286 80	0.37	1,112,029 30	0.27
Guano .....	2,763,070 50	0.65	4,391,280 90	1.06
Whale fins .....	108,985 00	0.03	115,206 30	0.03
Train oil .....	1,146,691 10	0.27	925,043 90	0.23
Tallow .....	609,315 70	0.14	589,145 20	0.14
Tar and pitch .....	176,448 40	0.04	173,656 70	0.04
Palm and cocoanut oil .....	1,625,613 80	0.38	1,181,125 00	0.29
Olive oil .....	1,001,068 50	0.24	820,688 30	0.20
Rape-seed oil .....	482,766 30	0.11	547,369 10	0.13
Linseed oil .....	1,936,515 60	0.48	2,055,384 70	0.50
Clover seed .....	2,593,754 90	0.61	1,899,935 00	0.47
Rape and turnip seed .....	692,796 60	0.16	667,423 40	0.16
Linseed .....	64,417 10	0.02	25,944 40	0.01
Timber and staves .....	2,458,523 30	0.58	2,091,372 60	0.51
Other woods .....	1,352,132 70	0.32	1,428,690 20	0.35
Dye-woods and quercitron .....	1,070,005 20	0.25	776,824 90	0.19
Dye-wood extracts .....	819,077 50	0.22	1,024,156 80	0.25
Indigo .....	1,350,661 90	0.32	1,801,081 70	0.44
Saltpeter .....	3,724,930 90	0.88	4,836,443 20	1.19
Resin and galipot .....	565,576 10	0.13	726,121 30	0.18
Sulphur .....	171,319 50	0.04	151,770 20	0.04
Soda (calcined and crystallized) .....	545,020 00	0.13	429,901 80	0.11
Coals and cinders .....	4,053,508 90	0.96	3,690,149 50	0.91
Copper and silver ore .....	932,000 90	0.22	844,159 80	0.21
Iron, raw and smelted .....	1,775,539 50	0.42	1,729,662 60	0.42
Iron in bars .....	2,093,650 30	0.50	1,952,421 10	0.48
Copper, in bars and sheets .....	2,710,748 60	0.64	2,964,423 80	0.73
Zinc, in bars and sheets .....	2,540,895 10	0.60	2,590,094 50	0.64
Other raw stuffs and half-manufactured goods .....	40,307,406 80	9.53	40,898,036 20	10.04
Silk and half-silk goods .....	3,840,498 90	0.91	3,741,859 80	0.92
Woolen and half-woolen goods .....	28,776,834 70	6.80	26,306,556 50	6.45
Cotton goods .....	17,018,082 90	4.02	17,834,397 80	4.18
Linen, half-linen, and canvas .....	7,359,942 90	1.74	6,831,756 70	1.68
Other dry goods .....	9,751,405 00	2.31	10,608,666 70	2.61
India rubber goods .....	1,903,664 40	0.45	1,950,549 20	0.48
Rails (for railways) .....	450,046 10	0.11	352,585 10	0.09
Other ironware .....	6,266,568 60	1.48	5,008,498 20	1.23
Machines and instruments .....	8,177,375 40	1.93	8,252,966 80	2.05
Other products of industry .....	40,986,728 20	9.69	37,067,003 00	9.16
Total .....	422,938,564 10	100.00	407,282,526 40	100.00
Specie and precious metals .....	100,620,159 60	.....	56,135,722 40	.....
Grand total .....	523,558,723 70	.....	463,418,248 80	.....

Statements showing the commerce of Hamburg, &c.—Continued.

# IMPORTS BY COUNTRIES.

[Value in United States gold.]

Whence imported.	Articles of food.		Raw stuffs and half-manufactured goods.		Dry goods.		Products of art and industry.		Total.		Specie and precious metals.
	Value.	Per ct.	Value.	Per ct.	Value.	Per ct.	Value.	Per ct.	Value.	Per ct.	
Prussian ports on the Baltic.	439,674 60	0.0	448,154 55	0.0			\$3,883 70	0.0	\$91,722 85	0.0	
Schleswig-Holstein.	14,905 95	0.0	20,855 95	0.0			35,321 80	0.0	96,068 20	0.0	
Bremen and the Weser.	2,195,776 10	1.5	1,234,029 70	0.9	\$7,128 10	0.0	85,180 20	0.2	3,612,114 10	0.9	\$111,748 40
Oldenburg.	24,649 65	0.0	11,083 65	0.0			7,950 15	0.0	43,663 45	0.0	
East Frisia.		0.0	20,736 95	0.0			8,103 90	0.0	28,840 85	0.0	
White Sea.	5,864 30	0.0	125,063 30	0.1					130,927 60	0.0	
Russian ports on the Baltic.	91,249 20	0.1	3,591 40	0.0	701 60	0.0	4,184 05	0.0	96,946 35	0.0	
Russian ports on the Black Sea.	836,253 45	0.6	5,155 10	0.0			3,946 05	0.0	845,354 60	0.2	
Sweden.	60,424 60	0.0	376,049 50	0.3	1,763 60	0.0	289,101 00	0.6	786,388 70	0.2	
Norway.	1,978,581 25	0.9	1,216,875 15	0.9	14,894 05	0.0	137,897 20	0.3	2,647,897 65	0.7	3,661 15
Denmark.	15,860 30	0.0	16,948 00	0.0			1,054 35	0.0	32,808 35	0.0	
Holland.	3,229 65	0.0					238 00	0.0	3,467 65	0.0	
Great Britain and Ireland.	9,421,960 65	6.5	60,252,564 55	41.7	22,038,990 10	34.2	9,869,317 40	18.7	101,593,453 70	24.9	28,901,413 40
The Netherlands.	4,653,956 70	3.2	1,963,159 55	1.4	63,896 35	0.1	819,764 80	1.6	7,530,767 40	1.9	
Belgium.	953,204 65	0.7	1,488,329 00	1.0	674,879 95	1.1	1,498,550 35	2.8	4,624,965 95	1.1	2,556 00
France.	5,073,787 80	3.5	3,772,883 10	2.6	271,069 75	0.4	537,777 65	1.0	9,654,988 30	2.4	
Spain (inclusive of Gibraltar).	783,984 80	0.5	676,761 90	0.5	1,538 90	0.0	883 65	0.0	1,592,199 75	0.4	190 40
Portugal.	371,358 55	0.3	514,218 05	0.4	1,119 00	0.0	24,702 00	0.0	910,397 60	0.2	
Italy.	727,083 60	0.5	711,391 50	0.5	188 25	0.0	51,926 85	0.1	1,490,579 20	0.4	
Trieste.	78 55	0.0	9,272 50	0.0					9,351 05	0.0	
Greece and the Ionian Islands.	187,272 70	0.1							187,272 70	0.0	
Total.	26,747,068 55	18.4	72,596,616 40	50.3	23,076,834 65	35.8	13,384,672 60	25.4	135,895,187 20	33.3	29,018,254 85
Greenland.			118,371 70	0.1					118,371 70	0.0	
British North America.			30,240 80	0.0			714 00	0.0	30,954 80	0.0	
United States of America (exclusive of California).											
East coast of Mexico and Central America.	8,106,984 20	5.6	8,446,841 35	5.9	130,414 50	0.2	1,658,568 26	3.2	18,432,838 25	4.5	49,989 50
Porto Rico and St. Thomas.	688,706 60	0.5	794,855 75	0.6	59 50	0.0	6,628 30	0.0	1,488,240 15	0.4	2,587 05
Haiti and St. Domingo.	296,529 00	0.2	5,890 50	0.0	357 00	0.0	2,554 16	0.0	298,355 60	0.1	2,380 00
Cuba.	1,837,605 15	1.3	310,123 50	0.2			566 45	0.0	2,148,268 10	0.5	
Yucatan.	72,292 05	0.0					221 35	0.0	72,513 40	0.0	
Other parts of the West Indies.	52,877 35	0.0	7,965 90	0.0			1,309 00	0.0	59,843 25	0.0	8,779 30
Colombia on the Caribbean Sea.	146,635 35	0.1	88,992 95	0.1			2,017 90	0.0	1,184,610 95	0.3	19,211 35
Venezuela.	766,298 50	0.5	400,394 55	0.3			11,745 30	0.0	1,184,610 95	0.3	19,211 35
Total.	4,466,237 80	3.1	182,189 00	0.1	190 40	0.0			4,663,362 50	1.1	191,723 40

Statements showing the commerce of Hamburg, &c.—Continued.  
IMPORTS BY COUNTRIES—Continued.

Whence imported.	Articles of food.		Raw stuffs and half-manufactured goods.		Dry goods.		Products of art and industry.		Total.		Specie and precious metals.
	Value.	Per ct.	Value.	Per ct.	Value.	Per ct.	Value.	Per ct.	Value.	Per ct.	
Brazil.....	\$12,083,447 85	9.0	\$944,279 30	0.7	\$138 05	0.0	\$20,898 35	0.0	\$14,048,673 55	8.5	\$7,868 50
Argentina and Uruguay.....	308,068 15	0.2	2,315,801 90	1.6	1,642 20	0.0	12,356 95	0.0	2,637,899 20	0.7	20,706 00
Patagonia.....	.....	.....	23,597 70	0.0	.....	.....	.....	.....	23,597 70	0.0	.....
West coast of America (exclusive of Central America).....	320,921 60	0.2	11,554,831 00	8.0	4,068 10	0.0	32,848 75	0.1	11,912,299 45	2.9	67,384 95
Algeria.....	.....	.....	5,814 35	0.0	.....	.....	.....	.....	5,814 35	0.0	.....
West coast of Africa and the islands.....	14,634 60	0.0	878,386 60	0.6	.....	.....	590 25	0.0	898,611 45	0.2	.....
East coast of Africa and the Cape.....	73,799 05	0.1	516,224 40	0.4	.....	.....	4,124 55	0.0	594,148 00	0.2	.....
Asia Minor.....	83,911 65	0.1	17,400 20	0.0	.....	.....	.....	.....	101,811 85	0.0	.....
British East India.....	1,705,515 15	1.2	58,961 15	0.0	.....	.....	.....	.....	1,764,900 40	0.4	.....
British East India, Singapore.....	288,459 25	0.2	173,016 50	0.1	119 00	0.0	13,068 85	0.0	455,203 00	0.1	.....
Dutch East India.....	213,514 55	0.1	67,225 50	0.0	.....	.....	13,863 95	0.0	281,004 00	0.1	.....
China.....	451,904 90	0.3	182,105 70	0.1	3,858 00	0.0	95,360 90	0.2	733,199 50	0.2	.....
Japan.....	220,747 40	0.1	95 20	0.0	.....	.....	.....	.....	220,842 60	0.1	.....
Russian Asia.....	14,970 35	0.0	.....	.....	.....	.....	53 35	0.0	14,970 35	0.0	.....
New Holland.....	.....	.....	14,532 30	0.0	.....	.....	.....	.....	14,532 30	0.0	.....
American Polynesia.....	.....	.....	96,835 05	0.1	.....	.....	.....	.....	96,835 05	0.1	.....
Society Islands.....	307 00	0.0	344,264 60	0.2	78 55	0.0	638 90	0.0	345,278 45	0.1	.....
The other South Sea Islands.....	.....	.....	970,283 15	0.7	268 95	0.0	1,556 50	0.0	172,108 60	0.2	.....
Total.....	90,004,064 00	41.2	101,145,056 50	70.1	23,215,658 90	36.0	15,263,163 00	28.9	199,621,962 45	48.0	29,384,077 40
From and via Altona.....	9,578,114 85	6.6	2,347,565 35	1.6	491,155 85	0.8	721,685 05	1.4	13,138,471 10	8.2	279,007 80
Total.....	99,582,186 85	47.8	103,492,621 85	71.7	23,706,814 75	36.8	15,974,788 05	30.3	212,760,438 55	52.2	29,663,085 20
By the Altona-Kiel Railway.....	11,649,904 85	8.0	3,878,179 15	2.3	905,906 55	1.4	1,782,127 85	3.4	17,716,117 90	4.3	48,300 35
By the Lübeck-Hamburg Railway.....	7,140,324 45	4.9	2,953,010 95	2.0	157,406 45	0.2	1,431,669 95	2.7	11,663,013 80	2.9	.....
By the Berlin-Hamburg Railway.....	16,245,962 35	11.1	11,324,170 90	7.8	20,268,287 05	31.4	13,261,314 80	25.2	61,066,755 10	15.0	1,618 40
By the Venloë-Hamburg Railway.....	10,213,229 75	7.0	11,845,207 65	8.2	14,263,328 10	22.1	14,073,047 10	26.7	50,394,813 60	13.4	32,260 80
From the Upper Elbe.....	21,500,846 20	14.7	6,680,789 50	4.6	55,157 00	0.1	1,884,679 15	3.6	80,071,461 85	7.4	.....
From the Lower Elbe.....	1,862,531 35	1.3	1,712,524 25	1.2	157 10	0.0	216,761 85	0.4	3,791,954 05	0.9	.....
From and via Harburg.....	2,022,804 85	1.4	1,062,897 80	0.8	234,199 15	0.4	1,102,927 70	1.1	3,896,546 50	1.0	.....
By land, per wagon.....	5,478,778 90	3.8	1,689,181 20	1.2	2,841,458 20	4.4	1,102,927 70	2.1	11,107,291 00	2.7	.....
By package-post.....	46,245 80	0.0	261,921 40	0.2	2,087,431 35	3.2	2,356,543 10	4.5	4,751,141 65	1.2	28,391,448 70
Grand total.....	145,747,862 35	100.0	144,371,554 65	100.0	64,523,187 70	100.0	52,640,002 35	100.0	407,292,527 00	100.0	56,135,722 45

## RECAPITULATION.

From German ports.....	82,275,000 35	1.9	81,424,890 80	1.0	87,128 10	0.0	\$105,429 25	0.2	83,812,424 50	0.9	\$11,743 40
From other ports in Europe.....	82,275,000 35	12.8	71,171,755 80	49.3	23,066,706 50	35.8	13,270,243 30	25.2	131,992,762 65	32.4	28,907,510 95
From ports in European Asia.....	33,237,020 45	22.8	28,549,439 95	19.8	141,824 20	0.2	1,868,490 40	3.5	83,816,775 00	15.7	884,823 05
From India and Australasia.....	9,578,114 85	6.6	2,247,565 55	1.6	491,155 80	0.8	721,635 05	1.4	13,138,471 10	3.2	278,007 80
By land and water.....	78,105,633 45	52.2	40,877,922 75	28.3	40,813,323 10	63.2	36,065,204 25	69.7	194,522,063 35	47.8	26,473,687 25
Total.....	145,747,832 35	100.0	144,371,554 05	100.0	64,523,137 70	100.0	52,640,002 25	100.0	207,282,526 55	100.0	58,135,722 45

Statement showing the commerce of Hamburg for the years 1877 and 1878.

## EXPORTS.

Articles.	1877.		1878.	
	Quantity.	Value.	Quantity.	Value.
<b>BY SEA.</b>				
	<i>N. Ctr.</i>		<i>N. Ctr.</i>	
Articles of food.....	11,660,373	\$60,451,048	13,773,874	\$62,261,042
Building material and fuel.....	700,616	348,432	773,454	311,780
Raw stuffs and half manufactured goods.....	5,852,081	40,392,646	5,576,136	31,664,948
Dry goods.....	364,474	27,496,378	368,224	26,072,424
Products of industry.....	1,663,159	29,161,902	1,488,535	24,973,102
Total.....	20,440,703	157,850,406		145,273,296
Specie.....		68,229,840		21,679,896
<b>BY LAND.</b>				
Articles of food.....	5,449,120	59,520,468	5,286,640	55,872,166
Building material and fuel.....	4,202,060	1,610,546	4,241,920	1,376,830
Raw stuffs and half manufactured goods.....	10,245,550	89,967,336	10,971,670	94,693,060
Dry goods.....	409,610	33,363,316	428,370	31,579,268
Products of industry.....	1,171,610	19,914,656	1,317,850	21,321,944
Total.....	21,477,950	204,366,316	22,196,450	204,843,268
Specie.....		7,727,622		9,696,738

## TRADE OF HAMBURG WITH THE UNITED STATES.

Statement showing the imports into Hamburg from the United States for the year ending December 31, 1878.

Articles.	Quantities.	Value.
Coffee.....	13,231 cwt..	\$190,533 30
Sirup.....	14,079 do..	48,706 70
Honey.....	16,649 do..	134,163 09
Raw tobacco.....	64,295 do..	1,464,561 09
Manufactured tobacco.....	1,881 do..	21,467 60
Tobacco stems.....	4,926 do..	7,063 80
Cigars.....	23,774 thousand.	1,034,271 80
Cigarettes.....	199,420 bundles.	16,322 00
Rice.....	99 cwt..	840 10
Candied fruits.....	48 do..	1,144 80
Nuts.....	56 do..	606 90
Fresh fruit and vegetables.....	872 do..	4,341 10
Dried fruit.....	13,076 do..	69,853 00
Wine.....	21 hectoliters.	885 40
Champagne wine.....	3,722 do..	1,901 70
Beer.....	25 do..	530 79
Rye.....	44,291 cwt..	83,880 70
Barley.....	7,720 do..	14,696 90
Oats.....	4,604 do..	7,649 30
Indian corn.....	386,695 do..	566,586 80
Pease.....	5,667 do..	13,844 70
White beans.....	205 do..	771 10
Hops.....	53 do..	1,056 70
Wheat flour.....	12,898 do..	40,405 30
Other kinds of flour.....	2,831 do..	24,999 50
Starch.....	13,189 do..	64,776 50
Grits.....	221 do..	764 00
Cattle food.....	501 do..	833 00
Caviare.....	2,629 do..	54,920 90
Oysters.....		10,688 60
Fresh fish.....	30 cwt..	611 70
Salted and smoked meats.....	120,006 do..	961,484 30
Sausage.....	384 do..	5,869 10
Butter.....	19,715 do..	258,191 90
Lard.....	311,164 do..	2,866,029 30
Cheese.....	642 do..	7,456 50
Condensed milk.....	39 do..	1,047 20
Preserves.....	13,208 do..	208,818 80
Other articles of food.....		3,005 90
Timber.....	98,469 cwt..	74,396 40
Staves.....	23,230 do..	20,427 50
Slats.....		24,930 50
Millstones.....	26 cwt..	45 20

Statement showing the imports into Hamburg from the United States, &c.—Continued.

Articles.	Quantities.	Value.
Indigo .....	cwt. 68	\$8,986 90
Logwood .....	do. 2,617	3,581 90
Quercitron .....	do. 796	878 20
Logwood extract .....	do. 30,433	298,466 30
Brazil-wood extract .....	do. 280	5,338 30
Yellow-wood extract .....	do. 390	6,637 80
Quercitron extract .....	do. 8,975	89,780 70
Flavine .....	do. 622	28,003 10
Dividivi .....	do. 406	595 00
Zinc white .....	do. 200	1,047 20
Various varnishes .....	do. 480	5,871 50
Other paints and colors .....	do. 77	2,001 60
Isinglass .....	do. 30	6,242 70
Sponges .....	do. 36	1,682 70
Sarsaparilla .....	do. 2,323	45,508 00
Nux vomica .....	pounds. 610	873 50
Other medicinal roots, barks, &c. ....	cwt. 334	14,713 20
Various medicinal seeds and fruit .....	do. 20	702 10
Licorice .....	do. 74	702 10
Resin .....	do. 504,055	581,700 60
Turpentine .....	do. 1,087	6,678 30
Gum-elastic .....	do. 148	4,890 90
Other gums .....	do. 765	2,882 20
Peruvian balsam .....	do. 26	2,380 00
Other balms .....	do. 29	2,039 70
Castor-oil .....	do. 72	966 40
Other medicinal oils .....	do. 430	12,733 00
Oil of peppermint .....	do. 157	35,788 10
Oil of turpentine .....	do. 23,877	139,836 90
Other etherial oils .....	do. 29	2,863 10
Iodide of potassa .....	pounds. 200	702 10
Various other salts .....	cwt. 82	3,515 30
Albumen .....	do. 506	17,064 60
Various drugs .....	do. 54	3,243 90
Other chemicals .....	do. 87	6,980 50
Lead ore containing silver .....	do. 359	6,664 00
Copper ore containing silver .....	do. 1,701	19,040 00
Other copper ore .....	do. 4,718	37,615 90
Silver ore .....	do. 3,184	68,194 10
Copper containing gold and silver .....	do. 114	3,624 70
Other copper .....	do. 28,597	568,008 30
Raw zinc .....	do. 26,539	276,113 30
Brass in sheets .....	do. 9,762	282,689 30
Grindstones .....	do. 431	2,460 90
Dry and salted hides .....	do. 14,246	122,760 40
Deer-skins .....	do. 420	12,763 90
Calf-skins .....	do. 64	1,794 50
Furs and other skins .....	do. 3,699	553,833 10
Leather .....	do. 57,318	1,510,966 80
Horn-tips .....	do. 510	6,585 50
Horn cuttings .....	do. 1,453	4,705 30
Mother-of-pearl shells .....	do. 484	18,775 80
Whale fins .....	do. 177	36,061 80
Bone-black .....	do. 678	1,967 30
Bone-meal .....	do. 7,218	13,984 90
Bone-ashes .....	do. 8,760	13,613 60
Guts .....	do. 10,071	97,794 20
Artificial manure .....	do. 60,781	57,853 00
Sulphate of ammonia .....	do. 3,466	18,649 70
Horse-hair .....	do. 23	749 70
Bristles .....	do. 186	8,206 20
Bed-feathers .....	do. 537	17,904 70
Ornamental feathers .....	pounds. 400	587 90
Glue .....	cwt. 84	1,280 40
Spermaceti .....	do. 1,048	30,987 60
Stearine .....	do. 644	5,800 10
Tallow .....	do. 29,977	274,107 00
Train-oil .....	do. 353	5,497 80
Refined petroleum .....	cwt. 639,421	1,535,377 60
Petroleum and other lubricating oils .....	do. 462	4,488 70
Other gas liquids .....	do. 819	3,808 00
Linseed-oil .....	do. 643	5,036 10
Nein .....	do. 1,240	8,423 20
Fat and grease .....	do. 8,589	62,215 60
Clover-seed .....	do. 51,196	561,508 60
Grass-seed .....	do. 8,709	39,331 90
Other field and garden seeds .....	do. 53	1,823 30
Mahogany wood .....	cubic meter 517	1,035 30
Cedar wood .....	do. 6,960	3,165 40
Walnut wood .....	do. 418,781	214,072 30
Veneers .....	cwt. 91	819 70
Other foreign woods .....	do. 14,419	79 78 10

Statement showing the imports into Hamburg from the United States, &c.—Continued.

Articles.	Quantities.	Value.
Plasaava .....	cwt. 160	\$690 20
Chair-cane .....	do. 704	1, 032 90
Cororo-nuts .....	do. 3, 443	18, 435 50
Live plants .....	do. 35	1, 410 80
Other vegetable raw stuffs .....	do. 136	828 20
Bristle hemp .....	do. 2, 173	12, 704 40
Cotton .....	do. 24, 103	313, 327 00
Hemp and jute .....	do. 210	1, 280 40
Cotton yarn .....	do. 19	483 10
Other raw and half manufactured stuffs .....	.....	2, 877 40
Silk and half silk goods .....	cwt. 14	4, 481 50
Woolen and half woolen goods .....	do. 201	13, 813 50
Cotton goods .....	do. 3, 055	104, 189 30
Linen goods .....	do. 23	894 90
Trimnings .....	pounds. 300	552 20
Oil-cloth .....	cwt. 117	2, 777 50
Other dry goods .....	.....	3, 705 70
Leather cloth .....	cwt. 863	19, 154 20
India-rubber goods .....	do. 491	23, 754 80
Leather gloves .....	pounds. 180	802 10
Leather boots and shoes .....	cwt. 33	1, 999 20
Other leather goods .....	do. 769	54, 066 50
New rope work .....	do. 232	2, 103 90
Twine .....	do. 20	678 30
Wooden pegs .....	do. 7, 528	29, 721 40
Furniture .....	do. 187	5, 181 30
Other fine wooden ware .....	do. 2, 081	20, 258 60
Other coarse wooden ware .....	do. 882	5, 938 10
Paper .....	do. 621	10, 481 50
Pasteboard .....	do. 203	1, 744 50
Wall-paper .....	do. 142	3, 729 50
Various paper pasteboard goods .....	do. 183	5, 540 00
Various stationery .....	do. 44	8, 960 70
Printed books .....	do. 174	11, 745 30
Painting and pictures .....	do. 16	8, 663 20
Engravings .....	do. 80	4, 952 80
Various glassware .....	do. 202	5, 002 80
Porcelaine-ware .....	pounds. 760	559 30
Crockery .....	cwt. 137	990 10
Slate boards .....	do. 1, 533	6, 947 20
Iron pipes .....	do. 2, 294	3, 558 10
Coarse hardware .....	do. 240	1, 627 90
Iron nails .....	do. 278	1, 906 40
Needles .....	pounds. 120	837 80
Fine hardware .....	cwt. 9, 286	160, 971 30
Gold and silver ware .....	pounds. 164	7, 858 80
Zinc-ware .....	cwt. 173	3, 022 60
Tinware .....	do. 100	1, 925 40
Other metal ware .....	do. 409	40, 514 70
Sewing-machines, and parts thereof .....	do. 18, 569	502, 022 90
Other machines, and parts thereof .....	do. 18, 613	338, 947 70
Pianos .....	do. 260	14, 989 20
Other musical instruments .....	do. 588	24, 828 20
Various other instruments .....	do. 270	28, 512 40
Watches .....	pounds. 290	7, 090 00
Various watches and clocks .....	cwt. 1, 733	54, 168 80
Parts of clocks and watches .....	pounds. 670	868 70
Wagons, and parts thereof .....	cwt. 1, 621	19, 856 30
Guns .....	do. 499	47, 278 70
Priming for fire-arms .....	do. 57	4, 926 00
Toys .....	do. 754	26, 275 20
Fancy goods .....	do. 768	32, 353 70
Natural curiosities .....	do. 54	4, 405 40
Soap .....	do. 262	1, 754 10
Perfumeries .....	do. 455	17, 024 10
Empty barrels .....	pieces. 1, 374	1, 696 00
Empty bags .....	do. 30, 039	6, 361 70
Passengers' effects .....	cwt. 821	68, 646 30
Other articles of industry .....	.....	1, 392 30
Total .....	.....	18, 432, 838 0

Arrival and departure of sea vessels at the port of Hamburg during the years 1877 and 1878.  
ENTERED.

Flag.	1877.						1878.					
	Number of vessels.			Register tons.			Number of vessels.			Register tons.		
	With cargo.	In ballast.	Total.	With cargo.	In ballast.	Total.	With cargo.	In ballast.	Total.	With cargo.	In ballast.	Total.
Argentine .....	1	1	2	576	14	590	14	14	28	21,000	396	21,396
United States .....	20	1	21	14,824	1,111	15,935	262	14	276	5,801	365	6,166
Belgian .....	6	6	12	2,560	83	2,643	83	10	93	5,801	195	5,996
British .....												
Chilian .....												
China .....												
Costa Rican .....												
Danish .....	65	26	91	22,208	5,690	27,898	884	223	1,107	61	37	644
German .....												
Bremen .....	143	65	208	45,080	9,140	54,220	929	574	1,503	158	63	1,661
Hamburg .....	758	90	848	532,521	21,855	554,376	19,679	730	20,409	762	113	20,521
.....	2	2	4	415	17	21	17	17	17	17	17	17
.....	19	4	23	6,325	608	6,933	108	33	141	13	5	146
.....	89	20	109	19,175	3,438	22,613	569	112	681	82	22	703
.....	690	455	1,145	50,627	31,475	82,102	2,691	1,619	4,310	415	415	826
.....	121	8	129	38,635	1,901	40,536	2,332	75	2,407	121	9	2,416
.....	2,139	107	2,246	1,153,526	44,029	1,197,555	38,172	1,645	39,817	2,007	146	40,823
.....	21	1	22	11,309	569	11,878	13	13	26	36	26	62
.....	271	23	294	52,848	2,309	55,157	2,863	102	3,065	253	35	3,318
.....	239	5	244	89,728	725	90,453	3,623	31	3,654	250	4	2,894
.....	5	3	8	1,989	34	36	33	7	40	7	7	47
.....	2	1	3	1,276	347	1,623	49	13	62	3	3	65
.....	3	5	8	2,542	63	2,605	63	3	66	87	1	153
.....	116	1	117	30,721	313	31,034	1,279	9	1,288	87	1	1,375
.....	14	1	15	2,969	213	3,182	1,146	10	1,156	7	3	1,163
With cargo .....	4,665			2,110,165			74,271		4,454			
Empty and in ballast .....		808		123,764				5,186				
Total .....			5,473	2,233,929					70,406			
								854				
									2,273,342			
												79,571



## Arrival and departure of sea vessels at the port of Hamburg, &amp;c.—Continued.

## CLEARED.

Flag.	1877.						1878.					
	Number of vessels.			Register tons.			Number of vessels.			Register tons.		
	With cargo.	In ballast.	Total.	With cargo.	In ballast.	Total.	With cargo.	In ballast.	Total.	With cargo.	In ballast.	Total.
Argentine	14	1	15	576	576	1152	14	14	28	9,001	12,146	21,147
United States	6	20	26	14,073	160	14,233	89	14	103	5,801	5,801	11,602
Belgian	6	6	12	2,500	83	2,583	10	10	20	8,801	8,801	17,602
Brazilian												
Chilian												
Costa Rican												
Danish	100	19	119	21,473	6,218	27,691	1	1	2	808	808	1,616
German:												
Bremen	130	70	200	42,442	8,912	51,354	200	88	288	19,198	2,545	21,743
Hamburg	672	191	863	454,242	111,615	565,857	572	143	715	441,792	183,242	625,034
Lubeck	3	4	7	688	23	711	4	623	627	34	34	661
Mecklenburg	18	6	24	5,777	1,575	7,352	53	11	64	1,938	2,985	4,923
Oldenburg	80	23	103	18,802	2,901	21,703	96	25	121	18,152	2,211	20,363
Prussia	784	284	1,068	72,475	22,335	94,810	1,087	64	1,151	56,861	17,784	74,645
French	99	27	126	46,540	12,630	59,170	360	110	470	49,439	12,196	61,635
Greek	1,553	682	2,235	816,294	381,574	1,197,868	10,803	1,569	12,372	827,930	345,452	1,173,382
British	13	10	23	6,117	6,288	12,405	148	18	166	8,091	5,453	13,544
Hawaiian	267	29	296	51,912	3,629	55,541	154	265	419	57,587	2,709	60,296
Italian	187	63	250	72,785	21,307	94,092	656	192	848	75,739	30,491	106,230
Dutch	4	1	5	1,276	413	1,689	12	53	65	2,010	1,911	3,921
Norwegian	3	3	6	1,623	1,623	3,246	62	4	66	314	2,426	2,740
Austrian	3	3	6	1,623	1,623	3,246	62	4	66	314	2,426	2,740
Portuguese	97	17	114	23,212	6,751	29,963	207	68	275	17,986	9,118	27,104
Russian	11	4	15	2,155	1,047	3,202	40	143	183	4,024	4,024	8,048
Swedish												
Spanish												
With cargo	4,042	1,447	5,489	1,649,403	504,183	2,153,586	3,929	1,387	5,316	1,055,835	638,281	1,694,116
In ballast												
Total							80,071		5,316			2,284,116
										62,402	17,772	80,174

Statement showing the navigation at the port of Hamburg for the years 1877 and 1878.

## SEA VESSELS ENTERED.

Whence.	1877.		1878.	
	Vessels.	Register tons.	Vessels.	Register tons.
Arrived from—				
German ports .....	1,149	105,564	1,152	107,174
Great Britain (colliers) .....	801	464,819	744	449,859
Great Britain (other vessels) .....	1,590	819,903	1,577	836,933
Other parts of Europe .....	1,093	305,713	1,034	318,770
America .....	694	457,120	671	495,553
Africa .....	43	13,861	40	11,793
Asia and Australia .....	103	66,949	90	63,280
Total .....	5,473	2,233,929	5,308	2,278,342
Of which were—				
Vessels with cargo .....	4,665	2,110,165	4,454	2,124,346
Vessels in ballast .....	808	123,764	854	148,996
Sailing vessels .....	2,515	501,469	2,336	505,475
Steamers .....	2,958	1,732,460	2,972	1,767,867
Percentage of the sailing vessels .....	460	225	440	222
Percentage of the steamers .....	540	775	560	778
Average burden of the sailing vessels .....		199		216
Average burden of the steamers .....		585		595

## SEA VESSELS CLEARED.

Whither.	1877.		1878.	
	Vessels.	Register tons.	Vessels.	Register tons.
Sailed for—				
German ports .....	983	80,460	954	91,420
Great Britain and Ireland .....	2,534	1,366,775	2,533	1,401,554
Other parts of Europe .....	1,228	338,598	1,102	320,120
America .....	574	385,682	557	399,736
Africa .....	98	26,522	104	28,741
Asia and Australia .....	72	45,599	66	42,545
Total .....	5,489	2,243,586	5,316	2,284,116
Of which were—				
Vessels with cargo .....	4,042	1,649,403	3,929	1,635,835
Vessels in ballast .....	1,447	594,183	1,387	628,281
Sailing vessels .....	2,523	505,115	2,335	506,741
Steamers .....	2,966	1,738,471	2,981	1,777,375
Percentage of the sailing vessels .....	460	225	439	222
Percentage of the steamers .....	540	775	561	778

Statement showing the navigation between Hamburg and the United States during the year 1878.

## CLEARANCES.

Whither.	With cargo.		In ballast.	
	Vessels.	Register tons.	Vessels.	Register tons.
For ports on the Atlantic Ocean:				
Baltimore.....	8	4,553	1	462
Boston.....			1	783
Brazos de Santiago.....	2	298		
Breakwater.....			2	1,779
Charleston.....	6	3,269	2	1,438
Coosaw River.....			1	473
Delaware.....			1	1,154
Doboy.....			1	856
Key West.....			2	2,289
New Orleans.....			6	5,541
New York.....	59	40,326	7	5,670
New York, D. S.....	54	116,183	1	1,857
Pensacola.....			1	444
Philadelphia.....	20	12,097	4	3,563
Portland.....			1	756
Port Royal.....	1	690		
Sandy Hook.....			9	8,426
Savannah.....	1	404		
Saint Helena Sound.....			1	384
Tybee River.....			2	1,612
Wilmington, N. C.....	3	1,187		
Total.....	154	179,007	43	37,487
Of which were steamers.....	54	116,183	1	1,857
From ports on the Pacific coast:				
San Francisco.....	4	2,304		

## ARRIVALS.

Whence.	With cargo.		In ballast.	
	Vessels.	Register tons.	Vessels.	Register tons.
From ports on the Atlantic coast:				
Baltimore.....	12	8,513		
Beaufort.....	1	345		
Charleston.....	14	5,896		
Coosaw River.....	3	1,372		
Doboy.....	1	856		
Mobile.....	4	2,053		
New York.....	64	42,273		
New York, D. S.....	55	116,594		
Norfolk.....	1	539		
Pensacola.....	4	3,015		
Philadelphia.....	7	4,573		
Portland.....	1	756		
Richmond.....	3	1,793		
Savannah.....	4	1,597		
Wilmington, N. C.....	34	12,723		
Total.....	208	202,898		
Of which were steamers.....	55	116,594		
From ports on the Pacific coast:				
Aleutes.....	1	262		
San Francisco.....	1	247		
Total.....	2	509		

*Emigration via Hamburg during the year 1878, giving native country of emigrants and destination.*

Native country of emigrants.	Destination.											Total.		
	United States of America.	British North America.	West Indies, Central America.	Brazil.	Argentine Republic.	Chili.	Peru.	Other Ameri- can States.	Africa.	Asia.	Australia.	Males.	Females.	Total.
Prussia:														
Province of Prussia	788	16	1	7	2	3	3	1	2		128	537	412	949
Province of Pomerania	1,105	16		73	3	16	4	1			319	887	689	1,526
Province of Brandenburg	852	1	12	13	3	16		4	33	3	271	752	457	1,209
Province of Posen	852	6							17		96	524	447	971
Province of Saxony	216			6			16	4	12		79	215	118	333
Province of Silesia	405	21		28	1				10	1	31	317	180	497
Province of Westphalia	83		3	9	1	1	1	1	137	1	28	153	112	285
Province of Rhine	122		1	108	3			2	8	1	30	173	103	278
Province of Hohenzollern	11										1	9	3	12
Province of Schleswig-Holstein	1,063	6	9	28	9	7	15	9	36	14	413	931	678	1,609
Province of Hanover	403	1	4	30	16	3	2	6	31	4	50	341	209	550
Province of Hesse-Nassau	212		5	9	2	12			1		35	179	97	276
Total Prussians.	6,113	67	35	311	38	45	39	26	294	24	1,481	4,968	3,505	8,473
Lauenburg	18		1			1					6	19	7	26
Bavaria, on the right bank of the Rhine.	496		3	4				2	1		8	313	201	514
Palatinate, Bavaria.	21			1			1					10	4	23
Saxony (kingdom)	359	15	2	73	4	3			56	2	77	406	185	591
Württemberg	285			3		2			2		45	220	117	337
Baden	187		1	7		9	2		1		1	136	72	208
Hesse.	246		1	2		2		4			2	161	94	255
Mecklenburg	352	1	2	15	9		1	1	14	1	24	246	175	421
Duchies of Saxony.	95			2		1						74	28	102
Schwarzburg and Reuss (principalities)	24			5	1	1		4	1			20	6	26
Oldenburg	15			4				3				20	6	26
Brunswick	63		1					3			15	78	11	89
Anhalt	15		1						1			16	2	18
Lippe	2									1		6		6
Waldeck	4					4				1	1	7	2	9
Lubeck	14			2	2			1			1	14	7	21
Bremen	10		9	1	2	2	1	2	1	5	7	28	11	39
Hamburg	356	6	25	39	15	26	30	27	23	17	47	403	208	611
Alsace.	31			1								16	16	32
Total from Germany.	8,706	89	82	470	70	94	82	72	384	50	1,718	7,170	4,657	11,827

*Emigration via Hamburg during the year 1878, giving native country of emigrants and destination—Continued.*

Native country of emigrants.	Destination.										Total.			
	United States of America.	British North America.	West Indies, Central America.	Brazil.	Argentine Republic.	Chil.	Peru.	Other Ameri- can states.	Africa.	Asia.	Australia.	Males.	Females.	Total.
Austria.....	1,518	10	2	66	1	3	1	1	112	.....	16	1,012	718	1,730
Hungary.....	661	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	406	255	661
Roumania.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8	1	9
Switzerland.....	24	29	13	2	2	.....	.....	.....	32	1	102	135	39	164
Denmark.....	1,011	5	1	3	10	2	1	3	45	5	613	1,208	537	1,735
Norway and Sweden.....	168	328	.....	.....	.....	.....	.....	.....	1	.....	112	232	61	293
Russia and Poland.....	2,412	1	.....	1,620	166	.....	5	1	38	1	.....	2,510	2,054	4,564
Great Britain and Ireland.....	24	.....	.....	1	.....	.....	.....	.....	1	.....	1	22	11	33
France.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	1
Italy.....	5	.....	.....	.....	.....	1	1	.....	.....	.....	.....	9	9	18
Holland and Belgium.....	8	.....	.....	1	.....	.....	.....	.....	.....	4	.....	10	3	13
Other European countries.....	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9	2	11
Total from Europe.....	14,555	460	100	2,165	251	100	90	77	623	62	2,574	12,730	8,327	21,057
United States of America.....	3,359	3	5	3	.....	1	1	3	.....	1	.....	2,176	1,197	3,373
Other countries.....	48	3	74	134	32	9	15	36	1	1	20	228	145	373
Grand total.....	17,962	463	179	2,302	283	110	105	116	624	64	2,595	.....	.....	24,803
Males.....	11,002	250	122	1,253	153	67	77	81	380	50	1,699	15,134	.....	.....
Females.....	6,960	213	57	1,049	130	43	28	35	244	14	896	.....	9,669	.....

## KÖNIGSBERG.

*Report, by Mr. Gaedeke, vice-commercial agent, on the commerce of Königsberg for 1878 and 1879.*

The great start of trade in 1877 mainly resulted from the Russo-Turkish war and the blockade of the Black Sea. These combinations, so eminently favorable to this place, of course ceased again on the return of peace, and the only hope left was that the decrease of our transactions in 1878, comparing to 1877, would not manifest itself too abruptly; in these hopes, at least, Königsberg has not been disappointed.

## GRAIN EXPORT FOR 1878.

The principal branch of commerce, the grain trade, proved, in 1878, still satisfactory, for, notwithstanding the crop in this province was not a very profitable one, the crop in Russia was very good, and the supplies from there were immensely large. Accordingly, the exportation of corn in 1878 was the largest which Königsberg ever had, excepting the year 1877.

*Exportation of corn from Königsberg and Pillau.*

Years.	Quantity.	Value.
	Tons.	Marks.
1870.....	279,963.2	39,180,000
1871.....	311,123.8	49,401,000
1872.....	203,159.7	35,340,000
1873.....	332,549.8	56,280,000
1874.....	356,985.2	61,783,000
1875.....	413,108.0	69,718,000
1876.....	303,215.7	51,800,000
1877.....	593,451.6	98,491,000
1878.....	576,077.2	99,165,571

## TRADE WITH THE UNITED STATES.

As regards the commercial relations of Königsberg and the United States, a great portion of the exportation as well as of the importation passes via England, and also via Hamburg and Bremen, of which no statistics are kept.

The main article of exportation is rags, of which 95,835 cwt., value 1,054,169 marks, were exported to the United States.

The principal article of importation is petroleum, of which 79,198 barrels were imported, against 113,322 barrels in 1877, 86,207 barrels in 1876, 121,327 barrels in 1875, 85,936 barrels in 1874, 104,495 barrels in 1873, 53,060 barrels in 1872, 63,975 barrels in 1871, 43,901 barrels in 1870.

The quality of the petroleum was much inferior to former years. The price was permanently declining, and business consequently rather unfavorable.

The importation of lard and bacon in 1873 was 69,609 cwt., against 34,454 cwt. in 1877, 25,240 cwt. in 1876, 10,236 cwt. in 1875, 23,636 cwt. in 1874, 54,615 cwt. in 1873.

The import of bacon may be rated at about 10,000 cwt.; the import of lard at nearly 60,000 cwt. From January till June a steady decline of prices took place.

## NAVIGATION.

There arrived at Königsberg-Pillau, in 1878, 985 steamers, measuring 1,146,377 cubic meters, and 2,115 sailing vessels, 448,286 cubic meters, a total of 3,100 vessels of 1,594,633 cubic meters, of which there cleared empty and in ballast 275 steamers, measuring 320,887 cubic meters, and 436 sailing vessels, of 78,484 cubic meters.

Among the arrivals were 31 sailing vessels from the United States.

Classed by nations, there arrived 1,412 German, 453 English, 643 Danish, 218 Swedish, 249 Norwegian, 118 Dutch, 3 Russian, and 2 Belgian vessels.

## GRAIN IMPORTS AND EXPORTS IN 1879.

In the first three quarters of the year 1879 the importation and exportation of corn was—

Months.	Importation.	Exportation.
	<i>Tons.</i>	<i>Tons.</i>
January .....	42,557	23,821
February .....	27,333	6,501
March .....	25,726	20,531
April .....	21,884	54,238
May .....	75,927	71,514
June .....	31,121	35,782
July .....	27,929	27,329
August .....	20,141	26,655
September .....	21,867	17,455
Total .....	294,685	283,024
First three quarters of 1878 .....	433,460	420,245

CONRAD H. GAEDEKE.

UNITED STATES CONSULAR AGENCY,  
Königsberg, November 1, 1879.

*Statement showing the imports at Königsberg for the year ending December 31, 1878.*

Articles.	Quantity.	Value entered.	Whence imported.
	<i>Tons.</i>	<i>Marks.</i>	
Wheat .....	215,815.1	41,004,809	Province of Königsberg and Russia.
Rye .....	153,162.3	21,442,722	Do.
Barley .....	61,198.2	7,955,766	Do.
Oats .....	67,194.0	8,063,280	Do.
Buckwheat .....	4,238.0	593,320	Do.
Pease .....	21,590.7	3,454,512	Do.
Beans .....	2,494.6	399,136	Do.
Taros .....	8,161.8	1,305,888	Do.
Hemp-seed .....	1,591.8	286,524	Do.
Linseed .....	16,400.7	4,264,182	Do.
Rubsen and rape-seed .....	14,523.0	4,211,670	Do.
Clover-seed .....	5,107.4	5,618,170	Do.
Grains, seeds, &c., without declaration of the species .....	31,432.7	5,343,508	Do.
Flax .....	20,000.0	15,200,000	Russia.
Flax-tow .....	1,500.0	540,000	Do.
Hemp .....	12,445.0	6,969,200	Do.
Hemp-tow .....	250.0	90,000	Do.
Tea .....	11,690.0	37,408,000	England, Netherlands, German ports.
Coffee .....	1,958.6	3,212,104	Do.
Rice .....	2,581.0	722,680	Do.
Spices of all kinds .....	661.2	661,200	Do.
Fruits .....	857.9	686,320	Do.

Statement showing the imports at Königsberg, &amp;c.—Continued.

Articles.	Quantity.	Value entered.	Whence imported.
	<i>Tons.</i>	<i>Marks.</i>	
Raw cotton .....	93.7	103,070	England, Netherlands, German ports.
Indigo .....	11.2	145,600	Do.
Olive and castor oil .....	389.6	311,680	Do.
Dye-woods .....	821.6	134,456	Do.
Sundry other colonial products .....	706.3	211,800	Do.
Amber .....	5.7	57,000	Province of Königsberg.
Pitcoals and cokes .....	128,500.0	2,056,000	England.
Salt .....	20,610.5	618,315	England, German ports.
Lime, cement, bricks, tiles, and whetstones .....	108,518.3	3,255,549	Do.
Glass, porcelain, &c .....	1,624.6	324,920	Do.
Sundry minerals .....	7,425.0	178,200	Do.
Pig-iron .....	8,221.9	575,533	England, Sweden, Germany.
Forged and shaped iron, sheets .....	5,890.4	824,656	England, Germany, Belgium.
Raw steel .....	254.6	112,024	Do.
Hardware .....	10,757.6	2,474,248	Do.
Small-ware .....	236.8	662,440	Do.
Copper and brass .....	230.1	41,418	England, Germany, Belgium.
Other metals .....	472.0	745,200	Do.
Instruments, engines, &c .....	4,131.1	1,652,440	Do.
White lead .....	197.0	94,560	Belgium, Netherlands, England.
Copper vitriol .....	84.3	35,406	Sweden, England.
Sulphur .....	438.1	74,477	Do.
Sulphuric acid .....	902.2	90,226	Sweden, Denmark, England.
Soda, soda-ashes, pot-ashes, saltpeter, &c .....	2,735.0	84,785	Do.
Alum .....	279.7	41,955	Russia, England, Sweden.
Green copperas .....	170.3	10,899	Do.
Caustic natron .....	679.2	183,384	England, Belgium, Germany.
Chloride of lime .....	330.7	49,605	Do.
Drugs and coloring stuffs .....	1,801.2	2,161,440	Do.
Double carbonic natron .....	68.7	13,740	Do.
Starch .....	643.0	282,920	Do.
Sundry other chemical products .....	1,232.7	1,380,624	Do.
Petroleum .....	13,859.6	3,049,112	America.
Cocanut-oil .....	457.7	411,930	England.
Oils and turpentine .....	2,201.0	1,276,560	Do.
Oil-cakes and sundries .....	3,068.8	458,256	England and the province.
Products of mills .....	9,694.1	3,392,935	The province.
Sugar, raw and refined .....	6,204.1	3,164,091	Germany, England, Netherlands.
Sirup, molasses, and honey .....	586.0	175,800	Do.
Spirits, aracc and rum .....	12,570.6	10,056,480	England, France.
Wine .....	2,003.9	2,003,900	Do.
Beer and port .....	1,684.6	505,380	England.
Tobacco .....	730.9	1,169,440	Germany, England, America.
Butter and cheese .....	347.7	625,860	Do.
Herrings .....	31,108.5	7,154,955	Netherlands, England, Norway.
Sundry consumption articles .....	5,914.7	828,058	Do.
Cotton yarn .....	1,010.9	1,910,492	England.
Cotton articles .....	528.7	1,586,100	Do.
Silk .....	5.2	124,800	France, England.
Woolen yarn and goods, shoddy .....	1,386.8	1,525,480	England.
Linen yarn and twist .....	176.5	355,350	Do.
Linen .....	2,145.9	3,694,912	Do.
Rags .....	7,738.0	170,236	Russia.
Bagging, canvas, and sundries .....	1,245.5	298,956	England.
Hops .....	60.7	182,100	Germany.
Paper, books, &c .....	1,313.5	631,440	Do.
Tar, pitch, and asphalt .....	1,709.1	341,820	Germany, Russia.
Sundries .....	11,097.0	1,775,520	
	91.8	55,080	
Tallow .....	904.1	904,100	Russia.
Bones .....	1,264.0	126,400	Do.
Skins .....	586.9	1,349,870	Do.
Leather .....	406.8	1,627,200	England, Germany.
Wool .....	1,218.9	3,656,700	Do.
Bristles, hairs .....	124.5	460,650	Russia.
Whale-oil .....	541.5	346,560	England, Sweden.
Firewood .....	2,930.5	52,749	The province.
Furniture, &c .....	1,329.3	719,394	The province, England, Germany.
Timber .....	173,490.0	2,046,500	The province, Russia.
Horses, cattle, &c .....	65,195.0	4,782,150	The province.
Total tons .....	1,091,565.1	251,418,951	
Total pieces .....	173,490.0		
Total heads .....	65,195.0		



Statement showing the exports from Königsberg for the year ending December 31, 1878.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Tons.</i>	<i>Marks.</i>	
Wheat.....	221, 175. 1	42, 023, 269	England, France, Nether'ands, Belgium, Sweden, Norway.
Rye.....	154, 302. 3	21, 602, 462	Do.
Barley.....	61, 678. 2	8, 018, 166	Do.
Oats.....	67, 794. 0	8, 135, 280	Do.
Buckwheat.....	4, 623. 8	647, 332	Do.
Pease.....	22, 300. 7	3, 568, 112	Do.
Beans.....	2, 719. 6	435, 136	Do.
Tares.....	8, 541. 8	1, 366, 688	Do.
Hemp-seed.....	1, 641. 8	295, 524	Do.
Linseed.....	16, 520. 7	4, 295, 382	Do.
Rubben and rape-seed.....	12, 673. 0	3, 675, 170	Do.
Clover-seed.....	5, 112. 0	5, 623, 640	Do.
Grains, seeds, &c., without declaration of the species.....	28, 917. 0	4, 915, 890	Do.
Flax.....	18, 957. 0	14, 407, 320	Do.
Flax-tow.....	1, 486. 0	534, 960	Do.
Hemp.....	14, 412. 0	8, 070, 720	Do.
Hemp-tow.....	252. 0	90, 720	Do.
Tea.....	10, 733. 0	34, 345, 600	Russia.
Coffee.....	1, 108. 7	1, 814, 988	Russia and the province.
Rice.....	781. 4	219, 792	Do.
Spices of all kinds.....	415. 0	415, 000	Do.
Fruits.....	26. 7	21, 360	Do.
Raw cotton.....	1. 4	1, 540	The province.
Olive and castor oil.....	228. 2	182, 560	The province, Russia.
Dye-woods.....	828. 2	132, 512	Do.
Sundry colonial products.....	2, 997. 3	899, 190	Do.
Amber.....	23. 8	238, 000	America, Austria, Asia.
Pitcoals and coles.....	9, 964. 8	159, 436	The province.
Salt.....	14, 967. 9	449, 087	Do.
Lime, cement, bricks, tiles, and whetstones.....	5, 606. 7	168, 201	Do.
Glass, porcelain, &c.....	434. 3	86, 860	Do.
Sundry minerals.....	1, 183. 9	28, 413	Do.
Pig-iron.....	3, 827. 7	267, 938	The province, Russia.
Forged and shaped iron, sheets.....	2, 089. 8	292, 572	Do.
Raw steel.....	6. 7	2, 948	Do.
Hardware.....	3, 539. 3	814, 039	Do.
Smallware.....	687. 6	1, 925, 280	Do.
Copper and brass.....	355. 3	63, 954	Do.
Other metals.....	829. 5	1, 327, 200	Do.
Instruments, engines, &c.....	2, 814. 9	1, 125, 960	Do.
White lead.....	0. 4	192	The province.
Copper vitriol.....	0. 3	126	Do.
Sulphur.....	213. 0	36, 363	Do.
Sulphuric acid.....	37. 6	3, 760	Do.
Soda, soda-ashes, pot-ashes, saltpeter, &c.....	1, 552. 1	431, 151	Do.
Alum.....	229. 1	34, 365	The province, Russia.
Green copperas.....	1. 6	102	Do.
Caustic natron.....	593. 6	160, 272	Do.
Chloride of lime.....	75. 7	11, 355	Do.
Drugs and coloring stuffs.....	963. 7	1, 156, 440	Do.
Double carbonic natron.....	73. 2	14, 640	Do.
Starch.....	58. 9	26, 466	Do.
Sundry chemical products.....	45. 5	50, 960	Do.
Petroleum.....	14, 828. 8	3, 262, 396	Do.
Coal-naut oil.....	14. 5	13, 050	Do.
Oils and turpentine.....	2, 607. 1	1, 512, 118	Do.
Oil-cakes and sundries.....	6, 774. 8	1, 228, 148	Do.
Products of mills.....	7, 174. 3	2, 511, 005	England, Belgium, Netherlands, France.
Sugar, raw and refined.....	1, 339. 1	689, 941	The province, Russia.
Sirup, molasses, and honey.....	77. 0	23, 100	Do.
Spirits, arac and rum.....	3, 547. 6	2, 838, 080	Do.
Wine.....	3, 580. 1	3, 580, 100	Do.
Beer and porter.....	3, 752. 8	337, 752	Do.
Tobacco.....	501. 3	802, 080	Do.
Butter and cheese.....	632. 8	1, 129, 040	Do.
Herrings.....	18, 268. 7	4, 205, 941	Do.
Sundry consumption articles.....	323. 7	45, 318	Do.
Cotton yarn.....	44. 3	83, 284	Do.
Cotton articles.....	17. 6	52, 800	Do.
Silk.....	1. 5	36, 000	Do.
Woolen yarn and goods, shoddy.....	92. 6	111, 120	Do.
Linen yarn and twist.....	182. 1	345, 990	Do.
Linen.....	1, 143. 8	2, 223, 822	Do.

Statement showing exports from Königsberg for year ending December 31, 1878—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Tons.</i>	<i>Marks.</i>	
Bags .....	10, 678. 2	2, 349, 204	America, England, Sweden.
Bagging, canvas, and sundries .....	1, 196. 3	287, 112	The province, Russia.
Hops .....	155. 0	465, 000	Do.
Paper, books, &c. ....	623. 2	296, 136	Do.
Tar, pitch, and asphalt .....	857. 4	171, 480	Germany.
Sundries .....	6, 163. 9	986, 224	
Tallow .....	1, 027. 7	1, 027, 700	Germany.
Bones .....	2, 762. 7	276, 270	England.
Skins .....	851. 5	1, 958, 450	Do.
Leather .....	603. 2	2, 012, 800	Do.
Wool .....	2, 514. 0	7, 542, 000	England, Germany.
Bristles, hairs .....	268. 3	952, 710	England, America.
Whale-oil .....	148. 7	91, 944	Russia.
Furniture, &c. ....	2, 194. 8	1, 024, 314	Russia, the province.
Timber .....	15, 290. 0	1, 065, 220	Germany, England.
Timber .....	1, 347. 0		
Horses, cattle, &c. ....	31, 983. 0	2, 461, 000	Do.
Total tons .....	806, 617. 1	222, 668, 932	
Total ship's-lasts .....	15, 290. 0		
Total heads .....	31, 983. 0		

Statement showing the value and description of declared exports from the consular district of Königsberg to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year 1879.	Total for the year 1878.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.		
Bristles .....	\$3, 665 90	\$7, 662 40	\$5, 570 00	\$3, 130 90	\$20, 049 20	\$16, 222 85
Hemp .....		2, 976 19	237 38	6, 823 63	10, 087 20	7, 119 05
Bags .....	68, 864 90	51, 975 74	127, 526 76	72, 928 72	321, 296 12	250, 992 72
Raw amber .....	96 07	1, 539 29	3, 623 51	5, 103 57	10, 363 04	7, 396 73
Seeds, hemp, mustard, and rape .....	1, 500 50	5, 175 01	5, 006 56	3, 768 86	15, 450 93	438 38
Miscellaneous .....	1, 949 79	1, 321 56	390 86		3, 661 70	6, 015 69
Total .....	76, 077 76	70, 670 18	142, 354 57	91, 755 68	380, 856 19	288, 184 82
Total for preceding year .....	78, 163 41	28, 389 75	57, 151 06	124, 460 00	268, 184 82	
Increase .....		42, 280 48	85, 202 91		92, 673 37	
Decrease .....	2, 085 65			32, 724 32		

## LEIPSIC.

Report, by Consul Montgomery, on the commerce and industries of the consular district of Leipsic, for the year ending June 30, 1879.

The district of country embraced within the jurisdiction of the Leipsic consulate furnishes very little material at present for the compilation of an annual report supplemental to the general information communicated in previous dispatches.

The statement showing the value of declared exports for the year ending September 30, 1879, discloses a very gratifying activity in all branches of trade and industry, and shows a steady and encouraging increase in the aggregate of exports to the United States, amounting to nearly 20 per cent. over and above those of the preceding year. The most marked increase has been in cotton and linen goods, furs, and half

woolen goods, all of which show a valuation about double the returns in the last report.

So far as one is enabled to judge from certain accepted and well defined indications in trade circles, I do not hesitate to report a very encouraging outlook for a continual advance in the business interests of this district, and I am confident that if the country maintains its present tranquillity and freedom from international disturbances, the great resources of the interior will be more and more developed, manufactures extended and improved, and commercial intercourse with America enhanced to such an extent as to prove advantageous and profitable to both countries.

An unfailing sign of increased prosperity is now seen in an annual activity in building in the city of Leipsic. A large number of stores and private dwellings are being constructed. These have been made necessary partly from the fact that the population of the city is increasing very rapidly, and, in a measure, from the establishment here on October 1, ultimo, by an enactment of the Imperial Parliament, of the supreme court of Germany, which has created quite a lively demand for apartments.

The third annual "*messe*" or fair was held in this city, according to a time-honored custom, from September 20 to October 20, ultimo, bringing, as usual, a large number of strangers to the city, and creating the customary activity and excitement in all branches of business enterprise.

The results were not as encouraging or satisfactory as anticipated, and it is annually becoming more and more evident that they will be less so in the future. Indeed, it is now candidly admitted that the frequency of these retail "*incursions*" is rapidly undermining their long established and long maintained popularity. From the general sentiment which now prevails, I am decidedly of the opinion that were it not that these fairs are sources of no little revenue to the city in the renting out of spaces for booths and in the imposition of an "*entrance tax*," they would soon be abolished entirely, as not sufficiently profitable in themselves for the trouble and expense incurred.

I have further to report what will be evident to every one acquainted with the rulings of trade, that since October 1, last, when the new protective policy or tariff, enacted last summer, was placed in operation, the prices of provisions of all kinds have materially increased, placing the actual cost of living upon a much higher basis than has ever heretofore been experienced. While this fact is indisputable, and is fully appreciated by the residents in all its force, it would seem almost impossible to realize the truth of the statement that the rate of wages has not advanced and the price of labor remains the same as under the old system of import duties. How long this will continue is a problem which it would be difficult to solve, but so long as it remains undisturbed it must be accepted as an undeniable fact that labor is abundant, and, therefore, under the absolute control of the employers.

In accordance with instructions from the Department, contained in its dispatch dated April 3, 1879, I inclose herewith a tabular statement "showing the humidity of each month of the year at places within this consular district where meteorological observations are taken."

J. EGLINTON MONTGOMERY.

UNITED STATES CONSULATE,  
*Leipsic, September 30, 1879.*

## MANNHEIM.

*Report, by Consul Smith, on the trade and industries of Mannheim, for the year ending September 30, 1879.*

## CONDITION OF TRADE.

I have the honor to report that since the date of my last annual report no events of great importance have occurred in this district. Having, in my last annual report, stated the extent and condition of my consular jurisdiction, I will now speak more especially of its present business condition.

During the past year business has not improved or manufacturing revived to any great extent, although during the last few months slight evidences of improvement are manifest, but whether this improvement is in anticipation of the new tariff, which takes effect January 1, 1880, or a permanent change of affairs for the better, remains to be seen.

It is thought by some observing Germans that it is the result of an improved state of affairs in the United States. Certainly the amount of exports thereto have during the year increased, and it is a noticeable fact that when exports to a country increase, the imports therefrom also increase.

## TRADE WITH THE UNITED STATES.

Exportation from the United States is well established and thoroughly advertised by the many export journals now published. They are of great use and should be encouraged.

In this district American grain and meat are bought to supply the deficiency of the home production. Were our ports closed to the export of these articles, discontent, war, and famine would ensue here.

Petroleum is everywhere used. United States hardware and table glass are fast finding a market in Germany. Any other article of our manufacture made in proper shape for German use can be sold; but care must be taken to have it so well manufactured that it will at once be distinguished from cheap imitations that will be placed upon the market by English or German manufacturers.

In a recent contract made for the sale of an American patent to be used in France and Germany, purchasers made a condition that no goods made under it in America should be sold in Europe; yet, owing to previous patents, only in the United States can the machinery be found necessary to manufacture the machinery needed to work this patent.

There is in this district a marked increase in the import of grain and meat from the United States. The meat trade, which was obstructed as long as it was locally conducted by American sellers or their agents, is fast being relieved from that embarrassment. The Germans have learned to take the trade into their own hands, thus removing much misunderstanding and false prejudice. The hinderances on the part of the people to the introduction of American products are fast being overcome, and the market for American goods seems permanent. With experience and careful management, American exporters will, I think, in the future find here increasing demand and remunerative sale for their goods.

In order to give a better knowledge of the articles exported from this district to the United States, I will in a few words allude to the different articles which enter thereinto.

*Books, paintings, and statues.*—Consisting mostly of Catholic books and statues for worship. The paintings are the work of some artists in Carlsruhe, who have an American reputation.

*Clocks and clock materials.*—These are made in the Schwarzwald, and are chiefly purchased on account of the carving of the wooden cases.

*Cottons and velvets.*—These are cotton velvets or plush.

*Drugs and chemicals.*—Mostly aniline colors and dyes, extensive manufactories of which are in this district; also, quinine, both in solid and liquid form.

*Glassware, mirrors, and plate glass.*—A very large French manufactory of plate glass is in this district. From year to year there is a perceptible reduction of their exports to the United States.

*Green corn and barley.*—The green corn is picked when the corn is in milky state, and dried either by the sun or in hot ovens, and is used for soups.

*Laces.*—Cotton laces, edgings, and furniture trimmings.

*Leather.*—Calf, kid, and morocco for bookbinders' use, and uppers for ladies' shoes.

*Paper boxes.*—For apothecaries' use.

*Tobacco.*—Mostly snuff.

*Silk goods.*—Ribbons; the amount of export is larger than last year, although some of the factories are closed and many of the skilled workmen have gone to the United States.

*Wines and brandies.*—Mostly Rhine wines. An increase in the quantity exported is exhibited. The prices range from 300 to 2,000 marks a thousand liters. Much of the wine sold under superior brands is manufactured from the poorer qualities.

#### THE CROPS.

The wine crop, like that of last year, is almost an utter failure. The time of flowering was unusually late and the blossom very unequal; consequently the growth of the vine was delayed. Want of solar heat and the prevalence of cold rains prevented the growth of the fruit, so that even now, the last of October, grapes in an eatable condition are not to be found growing in this region or in the Rhinegan or Pfalz. A full ripening cannot now be expected, even with the most favorable condition of the weather. In fact, this year's crop can be reckoned among the poorest for many a year. The failure of the wine crop for so many years (only one good vintage, 1873, having occurred since 1868) renders a successful year very desirable for the wine growers. Yet, from present appearances, the wood of the vine branches not having come to maturity this year, the prospect of a good crop next year is very doubtful.

The crop of tobacco is unusually fine and has been well gathered. Table A, annexed, gives the extent of the trade for 1877-78. The crop of hops has not been very large, but is of a very good quality. The crop of hay is good. Wheat not so good. Oats at one time promised well, but the heavy rains and wind laid them so that in many cases they were not gathered.

#### THE RHINDERPEST.

The cattle disease, which was so alarming in 1877, has disappeared. This is principally due to the care and attention given by the authorities to all cases where it appeared. In every case the cattle were killed and the carcasses buried. All straw, wood, &c., with which they had come in contact was burned or disinfected, and the ground that they had trodden upon was plowed over.

## MISCELLANEOUS.

The University of Heidelberg has had more than its usual number of students and those of Freiburg and Strassburg their usual number. The political condition of Baden is unchanged. During the year the superior court of Baden has been removed to Carlsruhe, and the new imperial court, absorbing the former courts of appeal of Baden, has been established in Leipsic, and practice under the new code of Germany has commenced; this is another step towards the unity of Germany. The railroads are gradually passing into the hands of the government. A new road has been constructed from Mannheim to Frankfort-on-the-Main, also some short connecting lines have been constructed.

In Alsace the office of president has been raised to that of governor. General Field-Marshal Freiherr von Manteuffel is appointed governor and installed. He is clothed with greater power than the former president.

The business condition of Alsace and other parts of this consulate, like that of Baden, is stagnant. Many people are without work, and the price of labor is very low; at present the outlook for the future is gloomy. Appearances would seem to indicate an increased emigration, yet no outward sign of political discontent is visible.

EDWARD M. SMITH.

UNITED STATES CONSULATE,  
Mannheim, October 30, 1879.

---

MAYENCE.

*Report, by Consular Agent Heidelberger, on the vintage and the wine trade of the district of Mayence, for the year 1879.*

Of the wine trade, as one of the leading branches of trade of this district, and of the grape crop, the report for this year, especially in respect to the latter, will be even less favorable than that of the previous year. The result of the grape crop in respect to quantity as well as to quality is to be counted probably, with one or two exceptions, as the most inferior of this century.

The condition of the vines and their first growing early in spring gave hopes for a very good wine year, but from that period the continuing unfavorable weather retarded the blooming for a considerable time—fully four weeks—besides causing a most uneven development of the blossoms, so that in some parts they had passed through the blooming when at the same time they had not yet begun in other parts. The new fruit in its inception, therefore, already showed great deficiency, from which, owing to the continuing exceedingly inclement weather during the following month and the whole summer season, it never recovered. On the contrary the development of the grape entirely ceased for some time, and remained behind with every month, so that now at the time when the fruit should be fully ripe it has only reached a degree of ripeness which renders its yield the most inferior produce. An exception may be found in the places in the province of Rhine-Hesse where the softer qualities of grape are cultivated, which have at least reached that ripening to make the wine fit for use in its original state.

As to the value of this produce, it is, of course, at present impossible to express any opinion. Owing to the failure of the crop, prices of the

lower grades of previous years' vintages, of which the stocks are reduced, have advanced some 25 per cent., which advance would have been followed by the better grades but for the continued dullness in the wine trade, owing to decreased consumption and the limited demand for these better grades. Only the United States, as an exception, show an increase in their consumption, the exports from this district having increased from \$187,000 for the year 1877-'78 to \$255,000 for the year 1878-'79.

With an improvement in business and an increased demand for better grades, there is no doubt that prices for all grades would have rapidly to undergo a material advance.

As an illustration of the relations of the grape crops for a period back, the following statistics for the last thirty years will be found interesting:

Very good: 1857, 1858, 1862, 1865, 1868—5.

Good: 1859, 1861, 1870, 1874, 1875, 1876—6.

Middling good: 1849, 1852, 1854, 1855, 1856, 1866, 1869, 1872, 1873—9.

Inferior: 1853, 1863, 1864, 1867, 1878—5.

Very bad: 1850, 1851, 1860, 1871, 1877—5.

Consequently, 5 very bad, 5 inferior, and 9 middling good against 6 good and 5 very good vintages, whereby it is to be considered that the middling good vintages of the inferior localities, which yield the larger portion of the crop, are anything but palatable wines.

The Phylloxera has fortunately not made its appearance in this district, not a single instance having been reported this year, and it is to be hoped that the country may continue to be spared from this most dreaded enemy of the vineyards. There is no doubt that the most energetic and thorough measures of the government against the importations of vines from infected districts have greatly assisted in bringing about so fortunate a result.

The following is a list of the quotations of prices for the present period:

Description.	Producer's prices.
<i>Rhenish wines.</i>	
Low qualities of the vintages of 1878 and 1877 ..... per 1,200 liters = 317 gallons..	Marks. 400 to 450
Middling qualities of the vintages of 1878 and 1877 ..... do.....	500 to 700
Better and fine qualities of growths of—	
Laubenheim } 1878, 1877 ..... per 1,200 liters = 317 gallons..	700 to 800
Bodenheim } 1876, 1875, 1874, 1872, 1870 ..... do.....	900 to 1,200
Bingen ..... }	
Nackenheim } 1878, 1877 ..... do.....	800 to 1,000
Nierstein } 1876, 1875, 1874, 1872, 1870 ..... do.....	1,000 to 3,000
Oppenheim ..... }	
Of the vintage of 1879 low and middling qualities paid so far ..... do.....	200 to 300
<i>Rheingau wines.</i>	
Middling qualities of vintages of 1878 and 1877 ..... per 1,200 liters = 317 gallons..	600 to 700
Good qualities of vintages of 1878 and 1877 ..... do.....	750 to 900
Better and fine qualities of vintages of—	
Eltville ..... }	
Erbach } 1876, 1875 ..... per 1,200 liters = 317 gallons..	1,000 to 1,500
Hattenheim } 1874, 1872, 1870 ..... do.....	1,600 to 3,000
Oestrich ..... }	
Winkler } 1876, 1875 ..... do.....	1,400 to 2,100
Geisenheim } 1874, 1872, 1870 ..... do.....	3,000 to 4,000
Dorf Johannisberg ..... }	
Hochheim ..... }	
Rüdesheim, 1876, 1875 ..... do.....	1,500 to 2,400
Raenthal, 1874, 1872, 1870 ..... do.....	5,000 to 6,000
Marcobrunn ..... }	
Steinberg } 1876, 1875, 1874, 1870, 1868 ..... do.....	6,000 to 14,000
Schloss Johannisberg. }	
Choice and choicest selections of growths of Oestrich, Hattenheim, Marcobrunn, Raenthal, Steinberg cabinet, Schloss Johannisberg vintages of 1876, 1870, 1868, 1865, per 1,200 liters = 317 gallons ..... do.....	10,000 to 30,000

Description.	Producers' prices.
<i>Rhenish red wines.</i>	
Growth of Ingelheim, vintages of 1876, 1874, 1870..... per 1,200 liters = 317 gallons..	<i>Marks.</i> 1,300 to 2,000
Growth of Asamalmshansen, vintages of 1876, 1874, 1870..... do.....	1,800 to 6,000
<i>Wines of the Palatinate of Bavaria.</i>	
Middling qualities, vintages of 1878, 1877..... per 1,000 liters..	400 to 450
Middling qualities, vintages of 1876, 1875, 1874, 1870..... do.....	700 to 1,000
Good qualities, vintages of 1878, 1877..... do.....	600 to 950
Good qualities, vintages of 1876, 1875, 1874, 1870..... do.....	900 to 1,200
Better and fine qualities, vintages of—	
Deidesheim, 1878, 1877..... per 1,000 liters..	600 to 900
Forster, 1876, 1874, 1870..... do.....	900 to 1,500
Choice selections, vintages of—	
Forster Traminer. { 1876, 1874, 1872, 1870..... do.....	1,500 to 5,000
Forster Riesling. }	
<i>Sparkling wines.</i>	
Hochbheimer:	
Middling quality..... marks per bottle.	2 50
Good quality..... do.....	2 50
Choice quality..... do.....	3 00
Johannisberg, choice quality..... do.....	4 00

## TRADE WITH THE UNITED STATES.

Great efforts have been made by competent and able parties to encourage the import trade from the United States to this district. They have, however, failed on account of the difficulties they encountered, partly owing to the general depression of trade and to other causes, among which chiefly the ignorance of tradespeople here as to the superiority of American goods justifying their somewhat higher cost, and further that the American trade declines consigning goods in order to make their qualities known abroad. It has also occurred that inferior American goods have been shipped and been paid for, resulting in losses to the importer, and thus discouraging the continuation of the business. American manufacturers willing to consign goods of their usual good qualities at fair prices, not the inferior, for which they have no market at home, would, no doubt, in the end find a good market here.

A. HEIDELBERGER.

UNITED STATES CONSULAR AGENCY,  
Mayence, October 31, 1879.

## SONNEBERG.

*Report, by Consul Winsor, on the trade and industries of the district of Sonneberg, especially its trade with the United States, for the year ending September 30, 1879.*

During the commercial year which has just closed, the value of declared exports from this consular district to the United States of America amounted to \$1,171,549.71, a sum of \$210,521.21 in excess of the value of declared exports during the previous year. The table appended to this report shows in detail the character of the merchandise which has been sent hence to the United States, as well as the worth of the same in each class and a comparison of the quarterly and annual sums with those of the previous year.



The apparent revival in the business of this region is confined, however, to the trade with the United States. Even in this direction, so far as relates to fair profits, the increased sales are said not to indicate growing prosperity. Indeed, the complaint has been very general that Americans have been enabled to purchase during the year at prices which barely covered the cost; the extraordinary low rates being due to a conjuncture of circumstances, chief among which may be named an unexampled slackness of trade with other countries and a keen competition on the part of dealers and manufacturers to sell at any figures which secured them against absolute loss.

England has been the greatest consumer of the industrial products of this part of Germany until the last two years; but the effect of the prolonged dullness in the commercial affairs of that country has been sensibly felt here during the past twelvemonth, and the exports hence to the English market have fallen off, it is estimated, from one-third to one-half the amount of prosperous years, although no exact figures bearing on this decline can be obtained.

Sales of the products of this district to Austria, likewise, have almost ceased in consequence of the new tariff which that country has adopted, the duties being to all intents and purposes prohibitory. For the same reason the trade with Russia has been greatly hampered; and, in fine, the business of the year with all other European countries, excepting France, perhaps, has been far from satisfactory. The French, as usual, have been fair customers, especially in purchasing the cheaper classes of articles, which they can import on account of the low specific duties which are fixed in their tariff.

The principal branch of industry in the neighborhood of Sonneberg and of the adjacent towns of Neustadt and Eisfeld is the manufacture of toys. The other most important industrial pursuits are the manufactures of glass, china, marbles, and slate-pencils, all of which articles are distributed throughout the commercial world through the two principal towns of the district—Sonneberg and Neustadt. The toy trade has been developed since the last century from the original use of the varieties of pine, fir, and beech, which are common to this region, in the manufacture of household articles. Beginning with toys made of wood alone, generally painted in divers colors, the business has gradually brought into its use a number of other materials, one of the most important of which is papier-maché. Wood, however, still remains the foundation and principal factor in the industry, which, it must always be remembered, is carried on solely by hand labor with no help from machinery. In the lapse of time a large variety of wooden toys, which were once in great demand, have disappeared from the trade, partly on account of the higher price of the raw material, and partly on account of a change of taste in the style of these articles. The earlier kinds of wooden toys, for instance, have been superseded in the United States by playthings of finer shape made of tin and other metals. As a result of these changes, the trade of the wooden-toy painters, formerly an important handicraft, has nearly vanished, although a few wooden toys are still made, viz, drums, flutes, fiddles, rattles, hoops, jumping-jacks, guns, pistols, polished cross-bows, and trunks.

In articles of which wood forms the most important part, such as doll-houses, stables, kitchens, shops, furniture, organs, rocking-horses, and mechanical and musical toys, there has been much foreign competition to contend with. In this and similar branches the skill of the wood-carver rises to art industry. In order to keep pace with the demand of the times, it is necessary for the youthful workmen, who live mostly in the adjacent villages, to attain a higher degree of proficiency than can

be usually transmitted from father to son. To this end, schools have been recently established in Schalkan and Haemmern for special instruction in wood-turning, and in Steinach and Judenbach for wood-carving and cabinet-making. These schools are affiliated with a polytechnic establishment at Sonneberg.

Toys composed of wood and papier-maché, of cement mass, patent mass, and other material, also figures and animals formed entirely of papier-maché or of teneolith, services of porcelain, glass toys, glass fruits, and ornaments for Christmas trees, glass beads, imitation human eyes, and a number of other articles, show the greatest variety in form and style. Plastic figures are all made from models, requiring that the workmen who excel in this branch shall possess a knowledge of the art of drawing and talent in modeling. Cultivation of taste in form and color, as well as a constant effort to produce salable novelties, are of the greatest importance in this branch of manufacture. It is also necessary, in order to meet the necessity of cheap production, that the labor in every department shall be divided as much as possible. Such articles are made from the cheapest to the finest. There are toys with simple movements by means of wire and India rubber, and toys with the most complicated mechanical arrangements; there are voices produced by the ordinary bellows-movement, and those which exactly imitate the sounds of animals if not of human beings. There are animals of all sorts—horses, dogs, cats, sheep, and birds—from the cheapest kind to those with natural skins, furs, and feathers; there are menageries copied from life; vehicles, from the commonest wheelbarrow to the finest equipage; railways, omnibuses, and farmers' wagons; figures from the ordinary harlequin to the most artistic statues; comic and political figures; military arms and accouterments of all sorts; Christmas men and Christmas angels, the manger at Bethlehem, &c., and especially dolls in every variety of size, style, and dress. In this latter branch of the toy-trade the business of Sonneberg centers. The female population takes an important part in the industry, especially in the hair-dressing and robing of dolls; and in the division of labor, through which alone all these articles can be cheaply produced and prepared for market, there are employed smiths, tin-workers, book-binders, paste-board makers, furriers, coopers, carpenters, cabinet-makers, and other craftsmen in the preparation of the various parts. Many materials which are needed in the manufacture have to be obtained from distant places, although they might very well be produced at Sonneberg. Among such materials may be named paper, leather, twine, glue, varnish, colors, wax, paraffine, gold and metal leaf, &c.

The goods are packed for shipment in wooden cases, which are generally lined with zinc if destined to cross the sea. There are about 100 persons engaged at Sonneberg in making wooden packing cases, and complaint is made that the prices for this necessity of the trade are too high in comparison with those of other neighborhoods.

Three other important branches of industry in this district take rank with that of toy-making, and are intimately connected with it, viz, the manufacture of glass ornaments and beads, stone marbles, and china-ware.

In the neighborhood of Lauscha, a village about fifteen miles distant from Sonneberg, some 800 persons are employed in the glass-works and in glass-blowing at their own homes. The principal productions are apothecaries' glassware, marbles, beads, ornaments for Christmas trees, thermometers, and eyes for dolls and animals. Artificial human eyes are also produced at Lauscha, of so perfect a quality that they have

gained a world-wide reputation and received a premium at the Philadelphia Exhibition.

Stone marbles are made from a shell limestone, found in the hills between Sonneberg and Eisfeld. The stones split easily into cubes under the hammer, and are ground into shape by water-power. The colored polished marbles are also prepared in the mills. A large number of persons are employed in breaking the stone for these marbles, but their earnings are miserably small. During recent years large quantities of crude marbles have been shipped to France and there made ready for market. Low duty and favorable freight conditions have rendered it possible for the French in this way to compete with the finished German article. The average quantity of marbles produced annually in this district exceeds one hundred millions.

There are twenty or more china factories in this consular district, each of which employs from 200 to 800 hands. The principal articles manufactured in these establishments are table services, figures, dolls, fancy-ware, pipe-bowls, and toys of various kinds. The clay used in these factories is mainly obtained in their immediate vicinity, only the very finest sort which is needed being imported from Bohemia and France.

Another important industry of this district is the production of slate for roofing, as well as for school-slates and slate-pencils. There are 23 quarries in the neighborhood of Sonneberg, which furnish stone of a superior quality for the manufacture of slate-pencils, the three largest of which belong to the ducal domain. In these quarries about 550 persons are engaged. One person produces on an average about 15,000 slate-pencils per week, and, reckoning 46 working weeks to a year, the aggregate production is about 250,000,000 annually, the value of which may be roughly estimated at \$115,000. These slate-pencils are mostly shipped in their natural color, although some are provided with paper or wooden envelopes. Until recent years this slate-pencil making was anything but a remunerative employment, as sales were made at any price on account of the great competition. In 1869, however, the workers in the ducal quarries, who form about two-thirds of the entire number engaged, founded an association for the purpose of keeping up prices to a normal standard, regulating the method of quarrying, educating the workmen, and putting by a working capital. The prices of slate-pencils are now fixed according to the condition of the business by a board of direction composed of twelve members of the association, and no member is allowed to sell the product of his labor lower than at the price named by the board of direction. Violators of this rule are expelled from the quarries for a term of a few weeks for the first offense, and if a member offends three times he is turned out of the association altogether. The plan has worked well for the interests of the slate-pencil makers who labor in the ducal quarries, and it is likely that those engaged in the smaller quarries will follow their example. These slate-pencils are exported largely to the United States as well as to all the countries of Europe.

#### WAGES, ETC.

Since last year, when I reported fully on the wages earned by the various handicraftsmen and factory operators, and the cost of the necessities of life to the laboring man, no material change in these respects has taken place. In the building branch only there has been a falling off, and the wages of masons and house-carpenters have declined slightly on this account. A sober, steady mason at Coburg lately told me that he now earns 52 cents per day against 55 cents last year. This man

may be taken as a type of his class. He is employed at his trade, on an average, 275 days in the year, including some Sundays, when urgency has been necessary. Like most of his fellow-workmen, he lives, for the sake of economy, in a village about an hour's walk from the city, spending two hours out of every twenty-four in going to and from his work. He takes his breakfast of chicory-coffee, without sugar, at five o'clock, his family, consisting of himself, his wife, and one child, consuming one-fourth pound of coffee and one-half pound of sugar, costing together 19 cents per week. At 8½ a. m. he takes a dram of schnaps and a piece of black bread and sausage, costing together 4 cents. At noon he drinks a pint of beer, costing 3 cents, and eats black bread and 3 cents' worth of cheese or sausage. At 4 p. m. he eats black bread again, and sometimes (not always) takes 2 cents worth of beer. In the evening his food, as a general thing, consists of potato dumplings (*Klöße*), varied, perhaps twice during the week, with fresh meat of very inferior quality, from which soup is invariably made. The cost of the black bread which this man consumes daily is at least 6 cents, and his sustenance on every working day must cost at least 26 cents, or just one-half of his day's wages. The remaining half must not alone support his wife and child, but must provide shoes, clothes, and meet all the miscellaneous expenses of the household, not the least burdensome of which is an annual community tax on his cottage of from \$3.50 to \$3.80. Part of the winter this mason is necessarily unemployed at his trade, and must content himself with an occasional job at wood-hauling, or anything else that offers. His wife is thrifty, spinning and knitting during the winter to supply the simple needs of her family, and in summer cultivating the patch of ground attached to her cottage, upon which she depends for the potatoes required during the year, attending to her small stock of poultry, which yields an occasional egg, or a chicken for the soup, perhaps, instead of the meat. The man told me that life with him was a constant struggle for a bare existence, and his looks fully warranted the assertion.

But, as I have already said, his case is typical, being neither better nor worse than that of most other laboring men, and I cannot say that he expressed discontent at his lot. Most likely he has schooled himself to bear patiently what he sees no chance of alleviating.

I also know a cabinet-maker whose wages amount to \$3.25 to \$3.50 per week. He has a wife, six children, a mother, and a bed-ridden aunt in his family. To the support of his household this workman contributes one-half his earnings, taking his breakfast of black bread and coffee at home. The remainder of his wages he spends upon himself, and cannot indulge in extravagances of eating and dress if he would. His energetic wife counts herself fortunate in receiving so much aid from her husband as he gives, and she works hard herself in selling vegetables from door to door, painting floors, &c., in order to keep her children decently clothed and shod. Her daily bread is necessarily meager, but she has no time to complain.

#### THE LEGION OF TRAMPS.

For a few years past the highways and byways of Germany have been infested by numbers of tramps and vagabonds—not wandering craftsmen seeking for work from town to town, whose privilege to beg has been always recognized, and who seldom failed to get a dole whenever they asked for it, but idle fellows of the baser sort, professional thieves and beggars, in fine, that class of vagabonds from which criminals of

all kinds are recruited. The number of these idle, worthless wanderers is legion. I have seen an estimate, said to be trustworthy, that during the winter of 1877-'78 not less than 10,000 tramps passed through the province of Hanover, and in January, 1879, in 186 communities of the kingdom of Württemberg, more than 70,000 of these pestilent fellows passed through. Making every allowance for repeated counting, still the remainder would seem an incredible number. In fact, the nuisance has become intolerable, and bids fair to work a great injury to the nation if it be not speedily abated. It is estimated that over seven millions of dollars are bestowed upon this rabble every year, which money is worse than thrown away. The sturdy vagabonds sometimes accompany their begging with threats, and the frightened women of the household are often glad to rid themselves of the intruders by giving liberally. One of these rascals was lately arrested for a crime, and on his person was found a bag containing copper and nickel coin, together 906 single pieces, amounting in value to over \$4, all of which he had saved from his three days' collection, besides having lived liberally in the meanwhile. If this be true, no wonder so many vagabonds exist, shunning honorable work and fast sinking to the plane of the basest animalism, and swelling the ranks of criminals. It is a fact that the increase of crime is everywhere noticed, especially house-breaking and offenses against the person. It is also said that the army of tramps is the best vehicle for spreading the teachings of the social democracy, the emissaries of this organization, under the guise of traveling craftsmen, penetrating to the remotest villages.

The steady growth of this evil has been witnessed since 1870, although the best observers are indisposed to attribute its existence, primarily, either to a result of the war with France or to the lack of work during the past few years. It has been demonstrated that the larger part of the mob of vagabonds is composed of work-haters; if employment is offered them, they vanish. Certainly many operatives have been discharged during late years from the large manufacturing establishments, and often a good handicraftsman must look long for a job; but for the purposes of agriculture there has been constant complaint of the lack of laborers. The evil is especially laid to the charge of radical social changes which admit of greater individual liberty. Until a comparatively recent period, a German peasant dared not leave his domicile without a passport from the police; and in case of a craftsman, the written permission of his guild. But now it is no longer required of a traveling workman that he shall show a certificate from the authorities that he has unsuccessfully sought work in one place before he is allowed to seek it in another. The development of the railroad system has had its effect in increasing the number of wanderers by the greater facility of traveling. Experience also shows that as soon as a workman yields to the spirit of vagabondage and becomes homeless, it is afterwards extremely difficult for him to settle down to a quiet life. He remains a tramp until failing health brings him to a hospital, or crime to a prison, or, as often happens, he ends his worthless life by the roadside.

How this terrible evil is to be abated is at present much discussed. Associations have been formed in many cities and villages with the view of suppressing it. The plan generally adopted is, that each member shall subscribe annually a small sum to a common fund which is distributed by duly authorized officers. Each member of the anti-tramp associations is provided with a shield which is fixed upon his house-door and witnesses that he belongs to the society. Should a beggar present himself in spite of this plain notice that he will get only a cold reception,

he is advised to apply to the almoner of the association. If he does this, and is found, on investigation, to be worthy of relief, a small dole is given from the fund, the amount being indorsed upon his "legitimation papers," without the possession of which he would have applied in vain, and he will get no further help from the same association until six weeks have expired. But the plan, in general, has not met the necessities of the case. It is certain that there has been no apparent decrease in the number of the vagabond beggars since it was put in operation. The plan, at best, is imperfect, and cannot be enforced as far as small villages and isolated houses are concerned. More effective methods to rid the country of this intolerable evil must be resorted to, either by the establishment of workhouses in which the vagabonds shall earn their bread by doing some uncongenial labor, or by the re-enactment of passport regulations, to the abrogation of which the overflux of tramps in the land is greatly attributed.

#### HINTS TO AMERICAN EXPORTERS.

Again I venture to call the attention of some of our exporters to a few points which I drew to their notice in my dispatch of January 15, 1878. They ought to be warned against their overanxiety to make large sales at the start, by which means they often overstock the German market with their manufactures before a paying trade has been fairly opened. The consequence of undue haste is forced sales at ruinous prices, working great injury to dealers who bought the earlier shipments and making them chary of handling American goods a second time. Many kinds of articles, on account of their novelty, can only be introduced to consumers by the expenditure of much patience and perseverance, meeting with slow sale at the beginning. I have also heard complaints that if the first renewal orders from Germany reach the American manufacturer at a period when he is busy producing for the domestic trade, in which, perhaps, better profits are to be realized, he is apt to leave the foreign demand unfilled until it is too late, the German dealer losing patience and canceling the order.

It likewise frequently happens, I am told, that manufacturers fix the sample lots at lower prices than they ask for the first orders. Practice of this sort naturally leaves a bad impression on the minds of dealers, obliging them to fill orders already taken at more or less loss. Again, it is said that our manufacturers produce more goods than they can well dispose of, and unsettle the trade by filling each succeeding order at a lower price.

Finally, having overstocked the market, some cases are cited of manufacturers who have established salesrooms in Germany themselves, and disposed of their wares at prices far lower than their former largest customers could afford to sell, often on long credit. In many branches of manufacture traveling agents of American houses sell their wares to retailers at the same rates which wholesale dealers have been required to pay, thus cutting the ground from under the feet of the latter, to whom is due the credit of having introduced, after infinite pains and trouble, these very goods to the German people. Our manufacturers are also reproached, to some extent, with selling goods of deteriorated quality after the first few shipments, thereby bringing our productions generally into disrepute, which, undeserved though it be in the main, is not easy to refute. I have thought it my duty to mention these animadversions, although I am in no position to indorse their accuracy. If, however, real ground of complaint exists, it would be vastly to the advantage of

our export trade if every effort were made to give satisfaction at this juncture, when our productions, to a great extent, are only taken on trial. A permanent and lucrative business on our part with Germany can only be attained gradually. To secure a flourishing business the utmost care must be exercised to deal fairly and honestly, as well as to prove the real merits of commodities. The characteristic dislike of the German people to novelties which are not of their own invention, and their conservative views with regard to the excellence of their own productions, are intensified into bitter prejudice often against the products of American skill and industry—a prejudice which is fostered by the belief that we are really about to take rank with some other nations of the world as exporters of manufactured goods, although our protective tariff acts as a barrier to the easy entry of the products of other lands within our borders. There are dissatisfaction and jealousy enough to contend with before our wares secure lively sales and a firm footing in Germany. It is the fashion now to decry them in the interest of domestic products, and our exporters can best overcome the obstacles, real and artificial, to their final success by the utmost caution, prudence, and tact in their initial efforts toward building up a permanent business.

A minor matter of great importance, to which I wish again to call attention, is the style of our packing-cases. They are generally too small, and always too heavy in proportion to their size. Packing-cases should be increased in dimensions and decreased in weight. In this way much incidental expense would be spared to European importers. Heavy packing-cases not only uselessly add to the cost of railroad freight by their superfluous weight, but also, in many cases, occasion wasteful expenditure at the custom-houses, where specific duties are levied upon the gross weight of the package and its contents. Our packing-cases are also open to the objection that they are easily broken open by thieves at the railroad stations and the shipping docks, thus accounting for the unusually large claims upon our exporters for "shortage." Perhaps the use of wire nails would obviate this fault. The best packing-cases, in all respects, are those made in France. They are probably more expensive than ours, but it should be the aim of our exporters to imitate their excellencies as far as possible. Very often, also, our goods are carelessly packed, being simply placed in cartons without being enveloped in paper or secured by loose paper to prevent movement during transport, and so it frequently happens that they reach their destination scratched and damaged. In this connection it may be mentioned that as higher rates are imposed by the new German tariff on many American goods, and the duties being specific, our manufacturers should strive to lessen the weight of all articles without detracting from their strength and durability. More artistic shapes should be aimed at in some styles of goods, adding to the lightness and elegance of the design and at the same time diminishing the bulk.

#### THE NEW GERMAN TARIFF.

Time must prove whether the new protective tariff of Germany, of which I furnished a translation and an analysis in my dispatches Nos. 310 and 311, dated respectively July 23 and August 1, last, is calculated to promote the public weal. This tariff was passed by a sudden and surprising coalition of men and political parties until then in strong opposition. Of course the expectation that any benefit to the nation at large will result from the tariff stands below zero as far as a very great portion of the population is concerned. The officials, active and superannuated, and the large class who live frugally on the interest of a small capital,

already see a threatened advance in the price of everything, with no corresponding advance in salary or income. Many industrialists, also, declare that the enormous increase in the cost of partially manufactured goods will ruin their business, or at least cut them off from competition in the markets of the world. In fact, the very men for whose ostensible advantage the entire change of front in the customs politics of the empire has taken place are already inclined to lower their high hopes and weigh the condition of affairs with more exactness. The large land-owners are now asking of what avail to them will be the duty on grain if all articles of consumption which they need for their families must pay direct duties and all which they require for their numerous laborers must pay indirect taxes in the form of higher wages. Under the most favorable circumstances, it is argued, when the harvests in France and England are poor and great necessity prevails in those countries, the great mass of grain from Russia, Hungary, and America which now flows into the German market will be diverted to France and England, where it may enter either free of duty or by payment of a very low rate. But even then the higher prices which the great German grain-growers will obtain for their crops in the absence of foreign competition in the home market will simply compensate for the enhanced dearness of everything else necessary to existence, perhaps leaving a small surplus. The smaller land-owners, on the other hand, who only raise a little more grain than is needed for their own use, must be quite content if the sale of their slight overplus shall cover the greater outlay for tools, wages, and the necessaries of life. But what if the harvests of France and England are good? The grain of the great cereal-producing countries of the East and of America will not be kept out of Germany by a duty of 50 pfennige (12 cents) on a hundred weight. Foreigners will pay this duty; competition will cause low prices, and German grain-growers will only be saddled with the disadvantages of greater cost of production and greater expenditure for their own living. If only the tariff protected agricultural interests it would be well enough, but with a duty on iron, wool, leather, and everything else which the land-owners and their laborers need, the advantage to the farmers of the new tariff is indeed questionable.

The iron manufacturers also give utterance to the opinion that, while it was necessary to protect their interests by the tariff, if their industry was not to be entirely swamped, yet the anticipated benefit was rendered problematical in view of the fact that not iron alone was protected but also everything else, thus increasing the cost of living and consequently the price of labor.

And so it is with almost every other branch of industry. Each one believes in protection specially for itself; but with a revenue tariff great dissatisfaction is expressed. The result might have been foreseen when the tariff was under discussion in the Imperial Parliament. Personal interests, under the cloak of patriotic policy, and selfish scheming were the moving springs of the so-called tariff reform, while those who opposed radical changes were stigmatized as doctrinaires. To pass the measure the various political parties merged themselves into unnatural coalitions, and dozens of interested men voted for duties which they absolutely disavored in order to secure certain specific and individual ends. Under such circumstances, no wonder that a strong reaction against the tariff is beginning to manifest itself, and that many for whom the benefit the change in the customs policy of the empire was set before them now look upon the result as the grave-digger of their prosperity. The radical change which has taken place does not seem to be hopeful in its first stages, and in its development must be carefully watched.



## A PHILIPPIC AGAINST AMERICAN SEWING-MACHINES.

The associated German sewing-machine manufacturers are now sending out through the newspapers an agonizing cry for aid and comfort. The German people are appealed to, on patriotic grounds, to forego any predilection which they entertain for American manufactured sewing-machines, and to buy in future only those of domestic make. The association admit that American machines during many years were the very best produced, not alone for doing excellent work, but also in point of finish, perfect adjustment of parts, and durability. Now, however, the broad assertion is made that German sewing-machines are superior in every respect to those produced elsewhere. With a great deal of acrimony the association declares that the German manufacturers are no longer open to the reproach of making "worthless imitations of the original article," and they purpose to show a bold front to all who dare to doubt them. The association boast that for some years past, wherever the machines of the two countries have been tested and compared side by side, the verdict is invariably in favor of those of Germany for combined excellencies of construction as well as for cheapness, and assert that American manufacturers are vainly striving to retain the hold upon popular favor, which the undoubted superiority of the home-made article is now fast relaxing, by establishing agencies for the sale of their machines in every city of any importance in Germany and palming off inferior articles upon the poor by the introduction of the weekly payment system, and that in these agencies the merits of the German machines are insidiously decried: The association finally implore the public support in their effort to drive away American competition and thereby save to the country annually many millions of marks which are paid to American manufacturers for an altogether inferior machine which is also dearer than that made at home. The association conclude their philippic with the information that they produce 400,000 sewing machines in Germany every year and give employment to 8,000 workmen; that the United States, by the imposition of an ad-valorem duty of 40 per cent., effectually shut out German competition in sewing-machines from their market, while Germany, on the other hand, quietly submitted to have this branch of domestic industry injured by Americans, who flooded the country with their inferior machines, which were admitted under a specific duty of less than 2 per cent.; and that, so long as this inconsistent state of things continued, it is the patriotic duty of the German people to buy only sewing-machines of domestic manufacture, and experience will prove that the sewing-machines of Germany, which are preferred to any others in England, France, Russia, Italy, Turkey, and South America, whither they are exported year by year in largely-increasing numbers, in reality are the very cheapest in the world!

## ART, INDUSTRY, AND AGRICULTURE.

An art and industrial loan exhibition was recently held at Sonneberg for the purpose of giving an opportunity to the working classes to profit by the view of some of the best productions of the brush, the chisel, the printing-press, the loom, the factory, and the workshop. The Duke of Meiningen lent several fine paintings as well as some vigorous cartoons by Kaubach, Ludwig, Richter, Andreas, Müller, and other masters. Other friends of the enterprise contributed from their artistic treasures to the collection, the result being quite a creditable exhibition of articles well adapted in the main to the purpose of stimulating the taste and

enlarging the ideas of the working people in a beneficial direction. The exhibition continued ten days, and it was largely visited by the class for whose special benefit it was opened.

At Coburg an agricultural fair on the largest scale ever known in this region was held during three days of last month, drawing visitors from near and far to see what certainly was a very fine display of fruits, flowers, vegetables, machinery, engines, implements, and live stock.

The department of this fair which merited most attention was that of agricultural machinery. There were mowers, reapers, threshers, winnowers, fodder-cutters, and a variety of other things, all of which were produced in German workshops, mainly from the factories of Saalfeld in Thuringia, Bayreuth, and Mannheim. Most of this machinery was described in the descriptive circulars as being made on the "American system," and to all practical intents the various mowing, threshing, reaping, and other machines were an imitation of American inventions and productions, lacking only in lightness of construction and fineness of finish the good appearance of the originals. How far the German manufacturers are authorized by the American proprietors to imitate these machines, or whether the right to manufacture is pirated or paid for, I am unable to say. The fact that these machines were on exhibition demonstrates, however, that the Germans are entering the field to supply the home demand for agricultural machinery of the latest construction. One Coburg firm displayed a fine assortment of spades, hay and manure forks from Massachusetts and Pennsylvania factories, which were all properly labeled to show their place of origin. There was also an exhibition of American notions, which appear to be fast finding their way into general use in German households. This fair was under the patronage of the Duke of Coburg, who took a lively interest in its success, contributing largely from his private gardens and two model farms, through means of which last he has already accomplished a great deal toward instructing his people in the best methods of carrying on agriculture and stock-breeding.

#### THE HARVEST.

Crops of every kind suffered this year from continued rain in the growing season and an absence of warm weather during the early summer. In the haying time another long period of wet destroyed an immense quantity of grass, both cut and uncut, and for a long time the lack of warm, seasonable weather caused the gloomiest apprehensions as to the prospect of obtaining even a moderate crop of cereals and roots. Fortunately, the weather became more favorable, and the wheat crop has turned out fairly.

Rye will furnish a good medium harvest, and oats a rich yield. Barley, although not widely cultivated, is of very good quality. The prolonged rains, however, have worked great injury to potatoes, which is a heavy misfortune to the poor of this district, who depend mainly upon this crop for their principal daily food.

#### MANUFACTURES OF COTTON HOSIERY AND GLOVES.

From the published report of the imperial commission, which was in session at the close of last year, to inquire into the condition of the spinning and weaving industries of the empire with the view of furthering these interests, under the new tariff, I gather some facts relating to the Saxon cotton hosiery manufactures which apply also to the estab-

lishment of Heinrich Schopper in this consular district. The representative of the cotton-weavers before the commission was Herr Gulden, of Chemnitz, the head of a large cotton-glove manufactory, employing 180 persons in his establishment and from 2,000 to 2,500 others at their homes. Herr Gulden said that the fancy needlework, embroidery, &c., connected with his business was necessarily done outside of the manufactory in order that the goods might be cheaply produced. As a general thing, the industry was carried on at the homes of the work-people. There were, indeed, several manufactories of hosiery where the work was exclusively done within the factory walls, and among these the most important were Schopper's, in Zeulenroda, and Woller's, in Stollberg, each of which employed about 800 operatives. The annual production of the entire Saxon cotton hosiery and glove weavers, according to the most correct estimates, was about 45,000,000 marks, and the amount of working capital employed in the manufacture might be put at from 25,000,000 to 28,000,000 marks. The looms were owned mainly by the weavers, not by the manufacturers, thus reducing the amount of working capital employed. The number of weavers employed at the looms was about 25,000, but to this number must be added one to two auxiliary persons at each loom, so that the total number employed in the Saxon cotton-weaving manufacture ranged from 80,000 to 100,000. This number included the families, as in this branch of industry everybody was compelled to work. Even the wives of some of the machinists of Chemnitz, during the hard times of the past few years, had earned good wages by fancy needlework and embroidery for hosiery and gloves. Men who formerly earned 30 to 45 marks a week as machinists had often been supported during recent years from the earnings of their wives and children in the hosiery branch of trade; that was the advantage of this great house industry. The earnings varied a great deal. A weaver of plain stockings or plain gloves often earned less than his wife, who did the fancy needlework required in the business. The average earnings per week were from 9 marks to 25 marks, and in exceptional cases 30 marks.

In the manufacture of gloves, only thread of the best quality was used. There were about 800 simple looms for gloves in operation, for which about 350,000 to 375,000 kilograms of fine thread were imported from Switzerland. Besides this, English and Alsatian thread was also used to some extent in the manufacture of gloves of the finest quality, of which material the witness last year used about 900 kilograms of numbers 60 to 110. Formerly this last-mentioned thread was obtained exclusively from England, but since Alsace had been annexed to Germany it had been principally bought in that province. At first the Alsace thread was not so good as the English, but now it was preferred, as it was manufactured of superior material, although in the equality of the thread and other small matters there might be an improvement. The English were making gigantic efforts to regain the trade in this article which they had lost. With regard to Swiss thread, it was impossible for any other country to compete with it, so far as the finer numbers were concerned; and so far as it applied to single thread, this branch had been taken entirely out of the hands of the English. At least half the thread used in the manufacture of hosiery was supplied by the home spinneries, but with gloves, on the contrary, a good deal of foreign thread was used, the home spinneries not producing thread fine enough for the purpose, excepting, perhaps, those of Alsace; but the Swiss thread was preferred on account of its greater equality.

The cost of material per kilogram for a dozen pair of plain stockings

was 6 to 7 marks, and for a dozen pair of gloves about 7 marks. The cost of labor, &c., in weaving hosiery was about  $33\frac{1}{3}$  per cent. of the value of the material, and of gloves the cost varied more or less, but the average was also  $33\frac{1}{3}$  per cent.

At present the Saxon cotton hosiery and glove industry was in the favorable condition that foreign competition, in comparison with the general trade, had been destroyed in every direction. The export to the United States last year amounted to \$3,828,560, of which there was a pretty accurate control through the reports of the American consuls. The export to England, France, South America, Australia, Italy, Sweden, Norway, Russia, &c., might be estimated at \$4,785,701. The export to America included only the invoice price, without duty. Through the tariff relations with France, the business of those who manufacture for home consumption had decreased, principally in the finer articles, which was a real hardship for the smaller domestic manufacturers. As far as related to cotton hosiery, the import amounted to only about 500,000 marks, but these were essentially goods which required fine material of great value in the manufacture. For instance, a dozen pair of fine socks imported from France paid a duty of about 1.05 marks; but, on the other hand, the duty on the most expensive socks, made of the very finest thread, which are of immensely greater value, was only 50 pfennigs per dozen pair. This was a very remarkable discrepancy.

The tariffs of other countries militated against the Saxon weavers in the sale of their productions. Take the United States, for example. Business with that country would be very much greater if a market could be found there for the cheap goods which were woven on round machine looms. America at present sought also to sell her productions in other countries, and this would make itself felt in the Saxon cotton-hosiery branch more and more.

Enormous variations in the price of cotton hosiery and gloves had occurred quite often during the last few years. The Saxons had succeeded in getting possession of the market for colored hosiery in consequence of the slowness of the English to respond to the tastes of the public for this class of goods, and in this branch very good wages had been earned. On the contrary, for plain hosiery the wages were very low. With regard to the manufacture of gloves, there had been many difficulties to contend with, inasmuch as there had been a large overproduction in some varieties for many years past. In consequence, the price had fallen very much. For eight or ten years it had been quite easy for any one who had a few thousand marks under his control to procure hand looms and obtain thread on credit. In this way the workpeople had made costly and unprofitable experiences. But a change was taking place, and skillful and experienced workmen were now contented rather to earn good wages than to manufacture on their own account.

The hosiery weaver was a very remarkable person, however. Often he worked simply long enough to secure the commonest necessities of life, and if he got high wages he worked generally so much the less. Fortunately, however, there were many exceptions to the rule. The manufacturers unanimously concurred in the opinion that an increase in the duty upon cotton thread would be detrimental to them. They believed that the cotton hosiery-thread spinners would be sufficiently protected by a duty of about 10 pfennige per pound on thread, including freight. In hosiery especially they had to meet an extraordinarily sharp competition on the part of England. One constantly read in the newspapers that the English had reduced wages so and so much; for plain hosiery a stage had been reached where there really was no ma-

terial difference between the wages paid in England and in Germany. To this must be added that the English had cheaper thread and had greater facilities for shipment by water than the Germans. The opinion was held that English and American competition in hosiery in the markets of the world had now become so threatening that every addition to the cost of production in Germany helped to place the industry in a critical condition, and on this ground an increase of the duty on cotton thread was opposed. The principal numbers used in the manufacture of hosiery were 16 to 40, but a few pence more for the finer numbers, say from 80 upward, might, however, be borne. In the export trade the average weight of a dozen pair of cotton hose was  $1\frac{1}{4}$  to  $1\frac{1}{2}$  pounds, and that of underclothing manufactured for the northern countries and the Levant, for a dozen light undershirts and drawers, from 3 to 4 pounds. By a yearly average production of 5,000,000 dozen stockings, socks, undershirts, and drawers, the estimated quantity of cotton thread required was not too great, when placed at 3,750,000 to 4,000,000 kilograms, of which, doubtless, three-quarters to four-fifths were covered by the German spinneries. The thread required in the manufacture of cotton gloves might be estimated at about 350,000 to 400,000 kilograms, thread Nos. 80 to 100; 15,000 kilograms Nos. 60 to 110, of which two-thirds were from Alsace and one-third from England; 5,000 kilograms Nos. 150 to 200, from England; 7,500 kilograms first quality thread, Nos. 20 to 40; and 25,000 kilograms double medium thread.

With respect to the quality of the thread, that which is produced from American cotton was most used; next came the Egyptian, which constantly grew in importance; while thread made of East Indian cotton was very little used. The weavers mainly required only the best thread, and well-conducted spinneries had, until now, made good profits in producing it.

Respecting the importation of hosiery thread, precisely under a protection of 6 pfennige per pound, domestic spinneries had prospered, although the Swiss had still to be depended on for prime grades. A great value was laid upon the competition of the Swiss in this direction, inasmuch as it spurred German spinners on to improve the quality of their productions, and so to equal the Swiss. It was feared that by burdening the importation of thread from Switzerland a large number of the German spinneries would allow the quality of their production to deteriorate, as was formerly sometimes the case. England had been almost entirely pushed out of the market for cotton thread, and only in the finest grades for stockings, socks, &c., was not to be dispensed with. It was a vital question for the Saxon weavers that the price of thread should not be increased, as they depended to the extent of four-fifths for their existence upon the export trade, and thus brought money from foreign lands into Germany. The condition of the German spinners was such that they could well exist without any increase of duty on their productions. Indeed, the proprietor of the principal spinnery in Chemnitz had voluntarily declared that he could keep on without any increase of existing duties.

The result of the inquiry, as far as the cotton-hosiery weavers is concerned, was not altogether unfavorable to them. The principal numbers used in this branch of industry being from 16 to 40; the duty under the old tariff was 12 marks per 100 kilograms for all numbers. Under the new tariff, the duties have been graduated according to the fineness of the thread. In commerce, the ordinary designation of the thread by numbers expresses the weight of the cotton in a prescribed length of thread. The spun thread, as is known, is wound upon a reel, and after

a certain number of windings is tied into a skein. Such a skein in England contains 840 yards. Having ascertained by weight how many skeins make an English pound, the result gives the fineness of the number of the thread according to the English gradation. The finer the thread the lighter it is; and so many more skeins go to the pound. Cotton thread No. 50 English is, therefore, 50 skeins of thread, or  $50 \times 840 = 42,000$  yards, weighing 1 pound. In fixing the new duties the cost of the thread has been estimated by adding together the value of the raw material and the cost of producing the thread. The raw material stands in an exact relation to the weight of the thread, and there is no essential difference between the fine and coarse numbers. The cost of production (capital and labor), on the contrary, in the finer numbers, notwithstanding that they are of the same weight, is very much higher. Considering this fact, all the numbers are under a fixed rate of 10 marks per 100 kilograms, with an addition of 10 per cent. on the cost of production. This fixed rate was decided upon to compensate the German spinners for the natural and economical advantages which the English enjoy over them with respect to the raw material—a factor which never changes in the cost of producing all numbers of thread. These advantages on the part of the English, it is said, coupled with their highly developed fine spinneries, have enabled them to compete too easily in the German market, especially in the finer threads and finer textiles.

Mr. Viotor, of the firm of Viotor & Achelis, of New York, testified before the imperial commission that he had an office at Bremen and was the purchaser in Europe for his firm. He bought among other articles cotton hosiery and underclothing, as well as mixed cotton and silk goods, such as are manufactured at Crefeld and Elberfeld, and also embroideries and zanellas. The exports to the United States had sensibly diminished of late years. For instance, the reports of the Chamber of Commerce at Chemnitz showed that the value of cotton hosiery and gloves sent to America from that city and the adjoining villages in 1872 was nearly \$4,785,701, against \$3,095,238 in 1876, and \$2,857,442 in 1877, showing a decrease in five years of not far from \$1,905,000. This decrease, it was true, was partly to be attributed to shrinkage of values, and partly to competition arising from the manufacture of these goods in America. The decrease in the amount of all articles exported from Germany to America during the three years from 1875 to 1877 was about \$4,100,000, although in the last-named year the amount exported was about \$1,500,000 more than in 1876. This was doubtless due to the returning prosperity in the United States. The export to America of all articles which did not require hand-labor in the manufacture had materially fallen off in consequence of the perfection of American machinery, by means of which a variety of wares were produced, which rendered little hand-work necessary. For instance, the witness during many years had made heavy importations of cotton hosiery. Before 1860, when the price of cotton was about the same as at present, he had bought stockings from 1.50 to 6 marks per dozen, but now he could not buy anything for the American market which cost less than 4.20 to 4.50 marks per dozen. All qualities were formerly sent in immense quantities to the United States, and he had dealt in them. Now, only those grades could be imported which required more or less hand-work in the manufacture. Machine-woven goods, which needed very little hand-work in their production, were now extensively made in America, and this applied to merino goods as well as to those made entirely of cotton—in fact, to all textiles which were produced by machinery. The English export had also fallen off in about the same degree. Formerly corsets had been ex-

ported very largely from Stuttgart to the United States. Damasks and goods of that kind were now also manufactured in America; bed and table linen were made by machinery on Jacquard looms; and in consequence of the high protective duties which were laid on manufactures of cotton, the producers in America could profitably compete with those of foreign nations, so far as prices were concerned. If it happened to be necessary, however, to give the goods a superior finish by means of hand-work, there were no workmen for the purpose, or, if they existed, the wages were too high. Germany's ability to compete in the manufacture of corsets had greatly decreased.

Stuttgart was formerly the principal place of export, and now the value of this article which was sent to the United States amounted to about one-third of what it was five years since. By means of improved machinery this class of goods was produced in America almost without hand-labor. Witness knew of a manufacturer in America who had invented a machine which made hosiery so perfectly that it only needed one boy to attend to ten machines, and the stocking was delivered complete, even to setting in the heel, without the slightest hand-work. This manufacturer was negotiating with a large Paris house for the sale of his patent in France. He seemed to have found little favor among the Saxon manufacturers. It was true that the woven ware for corsets, to some extent, was still exported to the United States; but all the business firms which formerly, without exception, engaged in this business took part at present, more or less, in the home trade. The diminished export to the United States was due also, to a great degree, to the inability of the American people to buy so largely as before on account of the shrinkage in values of real estate, manufacturing, and railway stocks, &c. Enforced retrenchment had been generally necessary since 1873. Germany had formerly exported very largely to the United States, and the depressed condition of business in America had injuriously affected Germany. Since 1876 there had been a slight improvement in the American markets—a slow but gradual gain in activity, of which proof was to be found in the export tables, and this gradual improvement in business matters might be reckoned on. Without doubt, in almost every branch of manufactures which did not require expensive hand-work and skilfulness, Germany, in future, would be forced to compete with American domestic manufactures. On an average the price of every variety of manufactured goods had fallen in Germany since 1875. In cotton hosiery the decrease had been from 15 to 25 per cent., and in gloves 30 per cent. It was true that in many branches an inferior quality of wares had been produced.

In consequence of the high customs duties in America many industries had been called into life which began to compete with those of Germany. Naturally, Germany sought to continue business relations with America, and was ill disposed to give up a profitable trade without a struggle. It must be acknowledged that the Americans were strictly honest in their manufactures, producing well finished and excellent wares, which they could sell, in consequence of the protective tariff, at cheaper prices than German manufactures cost. Germany, for this reason, had constantly sought to produce cheaper goods, and this could only be done by manufacturing inferior qualities. Germany was earlier disposed to yield to the circumstances of the case than were England and France. The English were very stiff in this regard. An English firm replied, in answer to a request that they should produce cheaper goods of inferior quality: "This is our quality, and this is our price; we make nothing else." In Germany, on the contrary, the demand was made for cheaper

goods, and the manufacturers filled the order, of course using inferior material. This applied to hosiery. It had often happened on request that stockings had been made an inch shorter in length, of cheaper thread, and of lighter weight, when no trade-mark was registered in America. Speaking from personal experience, the witness could not instance other wares which were manufactured of inferior quality to order. As far as zanella was concerned, a cheaper variety was manufactured, having a less number of threads in warp and woof, but that could not be termed a deteriorated quality; it was simply a cheaper quality. The German manufacturer was the very first to satisfy the needs of the foreign market, and the most elastic in doing all within his power to meet new demands. He also filled his orders promptly and correctly, and was always ready, in case of complaint, naturally under protest, to compensate for any deficit in quantity or quality. In the opinion of witness, the weaving industry in America had not a healthy development under the protective tariff of 35 per cent. *ad valorem*, as was proved in the failure of the companies by which the large mills were established. But these establishments were still in operation, and able to compete very strongly with foreign producers in spite of their unsoundness. The export of American cotton manufactures had increased nearly fivefold between 1871 and 1878. This was doubtless due to great overproduction and the necessity of finding a market somewhere. Brazil had purchased largely; Colombia had also bought; some heavy shipments had been likewise made to Liverpool. For two or three years the firm which witness represented had sent samples of American textiles to Mexico, the East Indies, and other places—calicoes, sheetings, shirtings, and ducks—which had resulted in experimental orders, and with Mexico there was now a regular business in these goods. The export to Shanghai and Calcutta was also pretty regular.

The cotton-textile manufacturing companies, however, in opinion of witness, made no profitable business by their export trade. A systematic difference had been often made by American manufacturers in the prices charged to foreign buyers and to home purchasers in favor of the former. This was the case, to some extent, also in Germany. Printed calicoes, for instance, which were always quoted in New York at stable prices, were bought by witness at  $\frac{1}{4}$  per cent. lower because they were intended for shipment. There had been particular reasons existing in America which made producers desirous of finding a foreign market for their goods, not simply to dispose of overproduction, but to avoid another difficulty, namely, an arrangement which manufacturers had made with purchasers with regard to price guarantees. It had been the custom in the United States for manufacturers, on receipt of orders, to guarantee future deliveries at the price then agreed upon; even in case of a fall of price within a certain time, restitution should be made to the purchaser of the difference between present prices and those which had been paid for goods already delivered. Of course it lay in the interest of manufacturers and their agents to keep prices steady; but this custom, until one or two years ago, was quite common. It existed no longer, however, to the same extent as it had, and it always proved costly to the manufacturers, and gave more or less occasion for quarrels and differences in regulating the matter. It was not to be supposed that goods would be sold without a certain profit. The nature of the business of Germany with the United States, to a great extent, was that of consignment, and so it was difficult to say whether the sales were profitable or not. It depended upon the articles. On some classes of



goods good profits were made and others were sold at a loss. But, on the average, it must pay, otherwise the business would not be continued.

Through this method of consignment, with some exceptions, mixed goods had been sold in the United States during the past few years at a great sacrifice. But some districts of the Rhine, although they had lost by some of their consignments to the United States during the past year, on the whole had covered their cost by a handsome commission. The ground of the decrease in price of German hosiery was without doubt principally due to cheaper raw material, partly to lower wages, and partly to overproduction and diminished consumption in Germany as well as in other countries of Europe and in America. Secondly, it might be traced to the stimulated production in 1875, which continued to the end of that year, and resulted disastrously for 1876 and the following year, when business was so bad that the manufacturers could not dispose of their heavy stocks. The foreign competition also must not be lost sight of in considering the causes of decreased prices. Since 1875 there had not been any disproportionate increase of production. If Germany would retain and increase her export trade in mixed cotton fabrics, she must be very cautious about increasing her customs duties. A difference of duty of one-sixth or one-fourth per cent. would weigh heavily in the scale in deciding a purchaser whether to buy German, French, Swiss, or English goods. With regard to hosiery, for instance, the Saxon manufacturers had recently given themselves a great deal of trouble to draw away business from England, and with great success. Super-stouts were manufactured of double thread, No. 24. Between this quality in England and Saxony there was a very small difference. Therefore when orders were received from New York, inquiry must always be made in Nottingham and Chemnitz; discount, rebate, and payment conditions must be carefully considered and calculated, and then a decision must be reached as to whether the order shall be filled in England or Germany. But if the price of the thread were to be increased by a higher duty and by less competition of the spinners among themselves, the goods would be made dearer. Often, in the case of super-stouts, the difference was only 1 penny a dozen, but that was sufficient to determine upon, where an order from 3,000 to 5,000 dozen was concerned. If the German goods could only be sold at \$2.50 per dozen and the English of the same quality at \$2.45 per dozen, the latter would be preferred, as they were 5 cents cheaper.

#### METEOROLOGICAL.

I very much regret that I am unable to send with this report a table showing the humidity of each month, as called for by department circular under date of April 3, 1879. No trustworthy observations in this direction are made in this consular district, but I hope in a future report to incorporate the desired information. A gentleman who is interested in meteorology has promised to note regularly the humidity of the atmosphere at Coburg and supply me with the result of his observations.

H. J. WINSER.

UNITED STATES CONSULATE,  
*Sonneberg, October 1, 1879.*

*Statement showing the value of declared exports from the consular district of Sonneberg to the United States during the four quarters ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December, 31, 1878.	March 31, 1879.	June 30, 1879.	September, 30, 1879.	
Baskets .....			\$341 78	\$121 30	\$463 08
Brass lamps .....	\$7, 156 56	\$5, 000 28	5, 968 28	5, 884 24	24, 609 36
Buttons, pearl, horn, and wood .....	13, 000 17	6, 149 18	1, 428 80		20, 688 15
Chinaware .....	8, 202 08	7, 130 31	76, 257 93	122, 085 52	213, 625 84
Drugs .....	519 96	545 76	360 76	954 57	2, 381 05
Dolls and other toys .....	\$7, 619 30	24, 804 05	146, 643 12	255, 768 60	464, 830 07
Glassware .....	5, 326 22	4, 586 05	4, 043 42	10, 577 20	24, 532 70
Guns .....	3, 886 00	3, 857 29	1, 816 75	4, 898 77	14, 458 81
Hardware .....	706 89	1, 738 59	1, 516 18	6, 683 15	10, 644 81
Hosiery (cotton) .....	59, 404 04	58, 491 81	40, 914 30	72, 774 76	231, 584 91
Kid gloves .....	2, 418 71	7, 511 27	892 37	308 57	11, 130 92
Mineral water .....			8, 305 77	7, 934 22	16, 239 99
Miscellaneous .....	2, 355 78	1, 096 48	595 18	13, 935 56	17, 983 00
Musical instruments .....	3, 318 54	2, 322 64	5, 359 57	15, 708 94	26, 709 69
Paints .....	2, 717 59	1, 292 54	7, 158 68	5, 950 63	17, 119 44
Seeds, plants, &c .....	19, 448 73	7, 886 47	1, 026 96	6, 290 31	34, 652 47
Slate-pencils .....	4, 807 32	2, 584 95	7, 472 06	10, 680 85	25, 045 18
Smokers' articles .....	439 48	2, 977 73	3, 118 05	8, 364 89	14, 900 15
Total in United States gold .....	170, 867 37	138, 575 40	313, 219 86	548, 867 08	1, 171, 549 71
Total for preceding year .....	131, 124 15	114, 882 57	313, 688 54	401, 333 24	961, 028 50
Increase .....	39, 763 22	23, 692 83		147, 533 84	210, 521 21
Decrease .....			468 68		

## STETTIN.

*Report, by Commercial Agent Burckhardt, on the trade of Stettin with the United States, with statistical table showing the general commerce of the port for the year 1878.*

The dullness of trade for some years now prevailing reached last year its culminating point, owing to the failure of the "Privat Bank von Pommern" at the close of the year 1877. A number of other heavy failures followed. The bank, which was looked upon for more than half a century as a thoroughly sound establishment, counted among its customers not only the trading class, but others of the laboring people, landholders, artisans, and citizens. Want of confidence prevented all spirit of enterprise, and business was strictly limited to the daily consumption. The effects of the Russo-Turkish war were also still felt, the purchasing power of the big czar realm being much lessened through the depreciation of the rouble standard by 33½ per cent. This last-named circumstance in return favored, however, the corn merchants in their purchases of Russian corn, so that the deficiency of our indifferent harvest could be covered again through imports from Russia as in previous years.

As regards the commercial intercourse of Stettin with the United States, petroleum is to be noted as the most principal import article, of which there arrived during 1878 174,540 barrels in 63 vessels from the United States direct, and 34,227 barrels indirectly per vessel and rail via Antwerp, Bremen, Hamburg, &c., a total of 208,767 barrels against 204,214 barrels in 1877, 211,875 barrels in 1876, 228,547 barrels in 1875, 189,476 barrels in 1874, and 254,868 barrels in 1873.

During the whole year prices gave way, partly occasioned through the inferior quality of the petroleum.

Of American lard there was imported direct 105,113 cwt.; indirect,

27,981 cwt., via England, Belgium, Bremen, and Hamburg; total, 133,094 cwt. against 88,160 cwt. in 1877, 93,848 cwt. in 1876, 46,142 cwt. in 1875, 204,546 cwt. in 1874, 394,502 cwt. in 1873.

The product in the United States increased so much that, notwithstanding the enlarged consumption in Germany, prices kept declining.

Of American bacon there was imported direct 10,619 cwt., and 11,260 cwt. indirect; total, 21,879 cwt., against 11,875 cwt. in 1877, 11,786 cwt. in 1876, 13,085 cwt. in 1875, 54,322 cwt. in 1874, and 146,203 cwt. in 1873.

For this article a retrograde movement during the whole year has also to be recorded, the increased consumption not being able to overcome the large production in the United States. Prices for native bacon decreased likewise, it also being given preference to the foreign at equal prices.

Of American tallow, there was imported direct 7,566 cwt.; indirect, 2,916 cwt.; total, 10,482 cwt.

Of American corn-starch there was imported direct 4,405 cwt.; indirect, 1,549 cwt.; total, 5,954 cwt.

*American resin.*—The import amounted to 111,842 cwt., prices declining gradually about 20 per cent. at first; "good strained" was quoted 5.50 to 5.70 marks; "clear," according to quality, 7 to 10 marks; ultimo December, 4.40 to 4.75 marks for "good strained," 6 to 10 marks for "clear."

Of American slate there was imported 3,856 cwt.

#### EXPORTS TO THE UNITED STATES.

The direct export from Stettin to the United States was in the past year but trifling, consisting of 20,366 cwt. empty petroleum barrels, 400 cwt. rags, 920 cwt. soda, 108 cwt. bicarbonate of natron, 182 cwt. chemicals, 3,304 cwt. cherry juice, 400 cwt. spelter.

A great part of the export passes from here via Hamburg or England, of which no statistics are kept.

#### GENERAL COMMERCE AND NAVIGATION.

*Imports.*—The total imports of Stettin for 1878 amounted to (by sea, river, and rail) 19,180,778 cwt.; 1877, 20,596,707 cwt.; 1876, 21,416,546 cwt., of which there was imported from the United States 841,017 cwt., valued at 12,006,948 marks.

*Exports.*—The total export was 14,970,623 cwt.; 1877, 15,804,754 cwt.; 1876, 15,325,749 cwt.; of which there was exported to the United States 37,763 cwt., valued at 402,134 marks.

*Navigation.*—There arrived at Stettin last year with cargo 1,151 steamers and 1,244 sailing vessels, in ballast 52 steamers and 330 sailing vessels; a total of 1,203 steamers and 1,574 sailing vessels, measuring 542,720 tons register.

Of the above, 89 sailing vessels came from the United States. According to nationality the following number of foreign vessels were employed in the trade: 199 Danish, 159 Norwegian, 459 English, 16 Russian, 58 Dutch, 7 French, 8 American, 97 Swedish, 2 Austrian, 1 Belgian; altogether, 1,006.

The vessels belonging to this port on the 31st of December, 1878, numbered 209, measuring 44,524 tons register, of which 33 were sea-going steamers.

LEOPOLD BURCKHARDT.

UNITED STATES COMMERCIAL AGENCY,  
Stettin, October 17, 1879.

Statement showing the imports at Stettin for the year ending December, 1878.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
	<i>Cwt.</i>	<i>Marks.</i>		
Waste .....	24, 920	99, 680	Free .....	Russia, Denmark, England.
Gummo .....	32, 961	230, 727	do .....	Norway, Belgium, England, North America.
Bags .....	70, 280	527, 100	do .....	Russia, Denmark, Sweden, Norway.
Cottons:				
Raw .....	42, 651	2, 345, 805	do .....	England.
Yarn .....	39, 217	4, 313, 870	6, 12, and 18 marks.	Do.
Goods .....	2, 117	465, 740	30, 48, and 78 marks.	Do.
Lead:				
Raw .....	2, 274	47, 754	Free .....	England, Belgium, Netherlands, Spain.
Ware .....	3, 669	88, 056	12 marks .....	Netherlands.
Brushmakers' goods .....	45	5, 400	Free .....	German ports.
Caustic natron .....	21, 975	307, 050	3 marks .....	England, Netherlands.
Bicarbonate of natron .....	3, 074	46, 110	0.75 mark .....	England.
Alum .....	4, 139	41, 390	1.50 mark .....	Do.
Chloride of lime .....	34, 999	279, 992	1.50 mark .....	Do.
Soda .....	261, 558	1, 307, 790	0.75 mark .....	England, Belgium.
Ammoniac .....	11, 477	631, 235	Free .....	Russia, Denmark, England.
White lead .....	771	18, 504	do .....	Belgium, Netherlands.
Coloring-wood .....	5, 568	50, 112	do .....	Sweden, England.
Coloring-materials .....	10, 555	189, 990	do .....	Denmark, England, Netherlands, France.
Bone-coal .....	99, 420	770, 504	do .....	Russia, England.
Chalk, ground .....	11, 245	17, 017	do .....	Sweden, Norway, England.
Sulphate of natron .....	7, 294	27, 081	do .....	Denmark, Norway, Sweden.
Copper, vitriol .....	651	11, 718	do .....	Sweden, England.
Potash .....	15, 230	319, 830	do .....	Denmark, England, Belgium.
Salt-peter .....	5, 941	95, 056	do .....	German ports.
Sulphur .....	58, 015	295, 876	do .....	Belgium, Italy.
Combustibles .....	2, 804	112, 160	do .....	Denmark, Sweden.
Other drugs and chemicals .....	46, 241	2, 312, 050	do .....	Russia, Denmark, Sweden, Norway, England, Belgium, Netherlands, France.
Pig-iron .....	1, 127, 441	3, 382, 323	do .....	Denmark, Sweden, England.
Wrought iron and steel .....	114, 699	1, 003, 616	1 mark .....	Denmark, Sweden, England, Norway, Belgium, Netherlands.
Railroad-iron .....	30, 305	285, 168	1 mark .....	Belgium, Netherlands.
Iron plates .....	22, 396	218, 361	2.50 marks .....	Belgium, Netherlands, England.
White-iron plates .....	1, 978	47, 472	2.50 marks .....	England.
Wire .....	1, 436	28, 720	1 mark .....	England, Netherlands.
Wheel-iron for railroad-cars .....	574	11, 480	1 mark .....	Netherlands.
Chains, &c. ....	4, 245	72, 165	1 mark .....	England.
Heavy castings .....	34, 170	683, 400	2.50 marks .....	Denmark, Norway, England, Belgium, Netherlands.
Wrought-iron tubes .....	25, 120	376, 800	2.50 marks .....	England.
Fine iron-ware .....	269	32, 280	12 and 30 marks .....	Do.
Chalk, raw .....	13, 451	7, 667	Free .....	Denmark.
Kryolith .....	7, 206	144, 120	do .....	Do.
Heavy spar .....	25, 991	97, 468	do .....	England.
Cement .....	2, 564	6, 410	do .....	Russia, Denmark, England.
Kaolin .....	148, 953	208, 534	do .....	Denmark, England.
Pyrites .....	74, 445	111, 667	do .....	Denmark, England, Norway, Spain.
Other mineral ore and stone .....	168, 990	236, 586	do .....	Russia, Denmark, Sweden, Norway, England, Netherlands, France, Portugal.
Flax .....	33, 248	1, 329, 920	do .....	Russia, Belgium, Netherlands.
Hemp .....	54, 051	1, 351, 295	do .....	Russia, England.
Oakum .....	26, 590	265, 900	do .....	Russia.
Jute .....	4, 751	95, 050	do .....	Russia, England, Belgium.
Anise, &c. ....	5, 824	174, 720	do .....	Russia, Netherlands.
Mustard-seed .....	4, 141	82, 820	do .....	England, Netherlands.
Rape-seed .....	34, 546	518, 190	do .....	Denmark.
Linseed .....	80, 390	1, 366, 630	do .....	Russia.
Clover-seed .....	19, 343	637, 662	do .....	Denmark, England, Belgium, Netherlands, France.
Hay and straw .....	13	52	do .....	German ports.
Seaweed .....	199	796	do .....	Do.
Fruit and potatoes .....	389	1, 945	do .....	Denmark, England.
Garden-seed .....	15, 007	375, 175	do .....	Russia, England, Denmark, Netherlands.
Glass, glassware .....	8, 626	189, 772	2 to 12 marks .....	Sweden, England, Belgium.
Hair and hair goods .....	2, 408	180, 232	Free .....	Russia.
Skins and hides .....	6, 420	642, 000	do .....	Russia, Denmark, Belgium.
Furs .....	374	93, 500	2 marks .....	Russia.
Firewood and charcoal .....	17, 175	34, 350	Free .....	Russia, England.
Swamp wood .....	36, 267	435, 204	do .....	England.

Statement showing the imports at Stettin, &amp;c.—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
	<i>Cwt.</i>	<i>Marks.</i>		
Bones, horns .....	9,404	112,848	Free .....	Russia, Denmark, England.
Coopers' wares .....	23,050	250,500	do .....	Russia, Denmark, England, Sweden.
Veneer-sheets .....	54	3,400	do .....	German ports.
Corks, &c. ....	901	36,040	do .....	Russia, Sweden, England.
Furniture .....	1,074	75,180	3 marks .....	Russia, Denmark, Norway.
Hops .....	151	22,650	Free .....	German ports.
Instruments, all sorts .....	61	24,400	6 marks .....	Do.
Boiler .....	98	1,980	2 marks .....	England.
Machinery .....	53,266	2,396,970	1 to 2 marks .....	Russia, Denmark, Sweden, England, Netherlands, North America.
India-rubber goods .....	1,206	477,576	Free .....	Russia.
Clothes, personal effects .....	11	4,400	30 to 120 marks .....	Denmark.
Copper .....	16,028	1,202,100	Free .....	Russia, Denmark, Sweden, England.
Other metal .....	1,299	116,910	do .....	Denmark, Sweden, Norway, England.
Copper in tins and rods .....	4,489	368,098	5.25 to 12 marks .....	Russia, England.
Copper and brass ware .....	1,815	272,250	do .....	England.
Hardware .....	56	16,800	45 to 150 marks .....	German ports.
Leather, all kinds .....	2,820	423,000	6 to 40 marks .....	Russia, England.
Leather goods .....	151	47,700	do .....	England.
Linen yarn and thread .....	7,579	757,900	1.50 to 12 marks .....	Do.
Rope and matting .....	2,560	128,000	1.50 marks .....	Russia, England, Belgium.
Packing-canvas .....	39,141	2,739,870	2 marks .....	England.
Linen, raw and bleached .....	1,333	266,600	12 to 30 marks .....	Do.
Candles .....	896	23,760	4.50 marks .....	Russia, Netherlands.
Objects of art and literature .....	1,420	284,000	Free .....	Russia, Denmark.
Beer .....	3,345	60,210	2 marks .....	England.
German spirits, brandy .....	12,697	457,092	18 marks .....	Russia, Denmark, England, Netherlands, France.
Vinegar .....	207	3,726	4 marks .....	France.
Wine:				
In cask .....	54,688	2,187,520	8 marks .....	Denmark, England, Netherlands, France, Spain.
In bottle .....	3,746	449,520	do .....	Denmark, Netherlands, France.
Butter .....	7,645	764,500	4 marks .....	Russia, Denmark.
Preserved meat .....	20,044	801,760	1.50 marks .....	Russia, England, Belgium, North America.
Fish, dried, anchovies .....	6,337	285,165	do .....	Denmark, Sweden, Norway, Netherlands.
Meat .....	46	2,760	Free .....	Denmark.
Fresh southern fruit, oranges .....	561	13,363	6 marks .....	Do.
Dried almonds .....	4,466	401,940	12 marks .....	Norway, Belgium, Netherlands.
Raisins and currants .....	17,330	320,605	do .....	England, Belgium, Netherlands.
All other southern fruit .....	886	17,720	do .....	Spain.
Pepper .....	7,074	244,053	19.50 marks .....	England, Netherlands.
Pimento .....	2,372	112,670	do .....	England.
Cinnamon .....	1,937	193,700	do .....	Do.
All other spice .....	275	68,750	do .....	Do.
Herrings .....	1,042,866	10,074,085	1 mark .....	Denmark, Sweden, Norway, England, Netherlands.
Honey .....	1,039	41,560	do .....	England.
Coffee .....	63,858	5,747,220	17.50 marks .....	England, Denmark, Belgium, Netherlands.
Coffee, surrogate .....	47	1,175	do .....	German ports.
Cocoa .....	756	45,380	19.50 marks .....	Denmark, England.
Caviar .....	7	1,750	24 marks .....	Russia.
Cheese .....	3,301	198,060	5 marks .....	Netherlands.
Confectioneries .....	1,098	100,640	21 marks .....	Netherlands, England, France.
Chicory .....	831	4,468	Free .....	German ports.
Dried home fruit and nuts .....	7,216	180,400	do .....	England, Netherlands, France.
Starch .....	9,023	162,414	do .....	Russia, Belgium, North America.
Flour .....	6,831	92,218	do .....	German ports.
Sago .....	5,214	104,280	do .....	German ports, Russia.
Oysters and lobsters .....	6	600	do .....	Denmark.
Rice .....	92,577	1,684,901	1.50 marks .....	Denmark, England, Belgium, Netherlands.
Salt .....	25,463	28,009	6 marks .....	Portugal.
Molasses .....	8,616	172,320	7.50 marks .....	Denmark, England.
Tobacco:				
Leaves and stalks .....	6,947	466,290	12 marks .....	Russia, Netherlands.
Manufactured and cigars .....	1,894	568,200	33 and 60 marks .....	Denmark.
Tea .....	263	47,200	24 marks .....	German ports.

Statement showing the imports at Stettin, &amp;c.—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
	<i>Owt.</i>	<i>Marks.</i>		
Sugar.....	290	14,500	12 and 15 marks	German ports, England.
Sweet oil.....	19,590	979,500	2.50 marks and free.	England, Denmark, Netherlands, Spain, Italy.
Linseed-oil.....	62,675	2,005,600	1.50 marks	Russia, England, Netherlands.
Other oil.....	50,950	1,783,250	do	Russia, England, Netherlands, Belgium.
Palm-oil.....	46,608	1,841,016	Free	Denmark, England.
Cocoonut-oil.....	4,733	236,650	do	England.
Fish-oil.....	40,925	1,432,375	1.50 marks	Denmark, Norway.
Paraffine and stearine.....	524	34,584	Free	Belgium.
Tallow.....	48,857	2,039,779	do	Russia, England, Belgium, North America.
Lard.....	184,883	5,395,320	do	Russia, England, Belgium, Denmark, Netherlands.
Grease, &c.....	4,169	166,760	1.50 marks	Denmark, North America.
Paper and paper-boards..	9,990	599,400	2 to 12 marks..	Denmark, Sweden, Norway, England, Netherlands, France.
Soap and perfumery.....	238	11,900	2.50 and 10 marks.	England.
Mill-stone.....	2,948	17,688	Free	England, Netherlands, France.
Slate, &c.....	162,797	468,391	do	Denmark, Sweden, England, North America.
Other stone.....	74,891	299,564	do	Denmark, Sweden, England, Norway, Netherlands, France.
Stone-goods.....	55	1,650	do	Sweden.
Coal.....	2,133,188	1,448,434	do	England, Belgium.
Cokes.....	68,042	34,021	do	England.
Mats and straw ware.....	2,774	110,960	12 marks.....	Russia, Denmark, Sweden, England.
Tar and pitch.....	39,621	396,210	Free.....	Russia, Denmark, Sweden, England, Belgium, Netherlands.
Asphalt.....	30,029	120,116	do	England, West India.
Roofing-felt.....	992	9,920	do	England.
Resin and turpentine.....	137,719	757,454	do	Denmark, Norway, England, Belgium, Netherlands, France, North America.
Petroleum.....	682,581	7,508,391	do	Belgium, North America.
Mineral oil (sundry).....	22,685	204,165	do	England, Belgium, Netherlands, France, North America.
Animal products.....	2,288	114,400	do	Russia, Denmark.
Bladder, bladder-skins.....	2,955	118,200	do	Russia, England.
Wax.....	151	21,140	do	German ports.
Bricks and tiles.....	70,443	105,664	do	Denmark, Sweden, England.
Porcelain and clay ware..	432	12,960	5 to 12 marks	Denmark, England.
Oil-cloth.....	78	7,800	2 to 6 marks	England.
Wool, raw.....	7,943	1,429,740	Free	Russia, Denmark, England.
Woolen, yarn.....	11,569	3,470,700	1.50 to 12 marks	England.
Woolen goods.....	3,910	1,466,250	30 to 90 marks.	Do.
Zinc.....	4,266	95,985	Free.....	England, Denmark, Sweden, Belgium, Netherlands, North America.
Tin.....	7,914	593,550	do	England, Netherlands.
Sundries.....	4,999	149,970	do	Russia, Denmark, England, North America.
Wheat.....	143,189	1,252,904	do	Russia.
Rye.....	2,055,007	13,357,545	do	Russia, Denmark, Sweden, Netherlands.
Barley.....	51,775	362,425	do	Russia, Denmark.
Oats.....	98,385	639,502	do	Do.
Pulse.....	47,786	384,502	do	Russia, Sweden.
7,770 tonnen timber, at 60 marks.....		512,820	do	Russia, Denmark, Sweden, Norway.
139 horses.....		55,600	do	Russia.
7 oxen.....		2,100	do	Russia, England.
45 young cattle.....		9,000	do	German ports.
165 pigs.....		9,900	2 marks per hd.	England.
287 sheep and goats.....		7,740	Free.....	Do.
11 vessels.....		227,000		German ports, Russia, Norway.
Totals.....	10,860,378	118,171,727		

Statement showing the exports from Stettin for the year ending December, 1878.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Owt.</i>	<i>Marks.</i>	
Waste.....	79, 812	319, 248	Russia, Denmark, Sweden, England.
Gummo.....	1, 417	9, 919	Russia.
Rags.....	22, 349	167, 617	Russia, Denmark, Sweden, England, North America.
Cotton:			German ports.
Raw.....	237	13, 035	Russia, Denmark.
Yarn.....	10, 445	1, 148, 950	Do.
Goods.....	12, 938	2, 846, 380	Russia, Denmark, Sweden, England, France
Lead.....	117, 327	2, 463, 867	Russia, Denmark, Netherlands.
Leadware.....	6, 015	144, 380	German ports.
Brushmakers' goods.....	49	5, 880	Do.
Caustic natron.....	307	4, 298	Russia, England, North America.
Soda.....	11, 126	89, 003	Russia, Sweden.
Alum.....	4, 418	44, 180	Russia, Sweden, England, Denmark, Norway.
White lead.....	73, 725	569, 400	Russia, Sweden.
Coloring-wood.....	11, 846	106, 614	Russia, North America.
Bicarbonate of natron.....	770	11, 550	Russia.
Chloride of lime.....	2, 005	16, 040	Russia, Sweden.
Coloring materials.....	2, 845	51, 210	Russia, Denmark.
Bone-coal.....	1, 947	15, 089	Russia, Sweden.
Chalk, ground.....	12, 184	18, 276	Russia, Sweden, Denmark.
Copper vitriol.....	7, 884	141, 912	Russia, Sweden, Denmark, England.
Mineral water.....	11, 529	138, 348	Russia, Sweden, Denmark, England, Norway.
Potash.....	31, 686	664, 986	Russia, Sweden, Denmark.
Sulphate of natron.....	32, 305	124, 374	German ports.
Saltpeter.....	1, 174	19, 958	Russia.
Sulphur.....	2, 682	26, 620	Russia, Denmark, Sweden.
Sulphuric acid.....	44, 534	187, 043	Do.
Axle grease.....	25, 296	252, 960	Russia, Denmark, Sweden, England, North America.
Other drugs and chemicals.....	122, 140	7, 328, 400	Russia, England.
Pig-iron.....	43, 660	98, 235	Russia, England, Sweden, Denmark, North America.
Wrought-iron and steel.....	60, 157	526, 374	Russia, Sweden.
Railroad-iron.....	2, 209	19, 329	German ports.
Wire.....	212	4, 240	Russia, England, Netherlands.
Iron plates.....	6, 671	68, 378	German ports.
White-iron plates.....	212	5, 088	Russia, Denmark, Sweden, England, Belgium, Netherlands.
Heavy iron and steel ware.....	80, 357	1, 607, 140	Russia.
Wrought-iron tubes.....	156	2, 340	Do.
Fine iron and steel ware.....	122	14, 640	Russia, Sweden.
Brownstone.....	7, 813	66, 410	Russia, Sweden, Denmark, England, Netherlands.
Cement.....	344, 439	861, 097	Russia, Denmark.
Gypsum.....	6, 188	9, 282	Russia, Denmark, Sweden, Norway, England.
Other ore and stone.....	630, 738	189, 316	Russia.
Chalk, raw.....	8, 031	3, 854	Russia, Denmark.
Flax, hemp.....	8, 109	101, 042	Do.
Anise, &c.....	755	22, 650	Russia, Denmark, Sweden, England, Netherlands, France.
Rape-seed.....	50, 962	764, 430	England.
Linseed.....	1, 073	18, 241	Russia, Denmark, England, Sweden.
Clover-seed.....	12, 746	433, 364	Russia, England.
Hay, straw, sea-weed.....	2, 793	11, 172	Denmark, Sweden, England, Belgium, Netherlands.
Potatoes.....	1, 365, 463	4, 096, 389	Russia, Sweden, Denmark, Norway.
Fruit, green.....	19, 632	117, 792	Russia, Sweden, Denmark, England, Norway, Netherlands.
Garden-seed.....	9, 294	232, 350	Russia, Sweden, Denmark, Norway.
Glass.....	9, 723	194, 460	Do.
Glassware.....	8, 764	438, 200	Russia, Sweden, Norway.
Hair, raw.....	714	53, 550	Denmark.
Bed-feathers.....	441	79, 380	Russia.
Oil-cloth and felt.....	228	20, 520	Russia, Denmark, Sweden.
Skins and hides.....	10, 125	810, 000	Russia, Denmark.
Skins and hides, dressed.....	949	71, 175	German ports.
Fur.....	10	3, 000	Denmark.
Charcoal.....	661	1, 983	Do.
Tanners' bark.....	3, 823	22, 938	German ports.
Foreign wood.....	293	8, 516	Russia, Denmark, Sweden.
Carved wood.....	5, 146	61, 752	Russia, England, Denmark, Sweden, Netherlands, North America.
Coopers' goods.....	34, 875	348, 750	German ports.
Corks.....	432	17, 280	Russia, Denmark, Sweden, Norway, England.
Furniture.....	6, 625	463, 750	

Statement showing the exports from Stettin, &amp;c.—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Cwt.</i>	<i>Marks.</i>	
Hops.....	4,586	687,900	Russia, Denmark.
Instruments:			
Musical.....	1,906	499,000	Russia, Denmark, Norway.
All sorts.....	943	680,100	Russia.
Boilers.....	1,536	30,520	Do.
Machines.....	84,949	2,548,470	Russia, Denmark, Norway, Sweden, England.
India rubber.....	1,907	762,800	Russia.
Clothes and linen.....	175	70,000	German ports.
Copper.....	33,417	2,506,285	Russia, Sweden, England.
Other metal.....	3,948	355,320	Russia, England, Netherlands.
Copper in tins and rods.....	31,524	2,584,968	Russia, Sweden.
Copper and brassware.....	10,652	1,381,500	Russia, Sweden, Denmark, Norway.
Quicksilver.....	337	48,865	Russia.
Hardware.....	100	40,000	German ports.
Leather, all kinds.....	4,252	637,800	Sweden.
Leather ware.....	1,492	447,600	Russia.
Linen yarn and thread.....	3,128	312,800	Denmark.
Rope and strings.....	2,872	143,600	Russia.
Canvas (packing).....	3,608	252,560	Denmark, England.
Linen, bleached and unbleached.....	12,848	2,569,600	Russia, Denmark.
Candles.....	7,486	449,100	Russia, Sweden.
Objects of art and literature.....	2,922	584,400	Russia, Denmark.
Beer.....	1,468	26,334	German ports.
German spirits, &c.....	93,754	2,156,342	Russia, Denmark, Sweden, Norway, England, Netherlands.
Vinegar.....	2,448	29,376	Russia, Denmark.
Wine:			
In cask.....	24,415	1,220,750	Russia, Denmark, Sweden.
In bottle.....	1,582	168,520	Russia.
Butter.....	596	59,600	Denmark.
Preserved meat and bacon.....	3,199	127,960	Do.
Fish, oysters, and sardines.....	419	25,140	Russia, Netherlands.
Oranges and lemons.....	1,438	35,950	Russia.
Almonds.....	1,856	81,320	Do.
Raisins and currants.....	1,686	33,720	German ports.
Dates and figs.....	109	2,180	Do.
Chestnuts.....	715	14,300	Russia.
Spices.....	876	39,420	German ports.
Herrings, 37,249 barrels.....	111,747	1,117,470	Russia, Denmark, Sweden, Norway.
Honey.....	248	9,920	German ports.
Coffee.....	7,258	689,510	Do.
Coffee, surrogate.....	484	6,510	Do.
Cocoa.....	66	3,960	Do.
Cheese.....	1,439	86,340	Russia, Denmark, Sweden.
Confectionery.....	5,337	533,700	Do.
Preserved fruit.....	1,037	93,330	Russia.
Chicoory.....	74,321	1,003,330	Russia, Denmark, Norway.
Home-baked fruit and nuts.....	38,873	971,825	Russia, England, Denmark, Sweden, Norway, Netherlands.
Starch.....	61,411	1,105,398	Russia, England, Denmark, Sweden.
Flour.....	404,270	4,042,700	Russia, Denmark, Sweden, Norway, England, Netherlands.
Other flour, fabrication.....	4,490	80,820	Denmark, Sweden, England.
Sago.....	1,305	26,100	Denmark, Sweden.
Rice.....	7,102	142,040	Russia.
Salt.....	89,352	98,287	Denmark, Sweden, Norway.
Molasses.....	217,650	870,600	Russia, Denmark, Sweden, Norway, England, Belgium, France.
Sirup, starch-sugar.....	3,768	56,520	Denmark, Sweden, Norway, England.
Tobacco:			
Stalks and leaves.....	2,823	197,610	Russia, Denmark.
Manufactured.....	2,678	214,240	German ports.
Cigars.....	1,836	826,200	Do.
Tee.....	143	28,600	Do.
Sugar.....	341,909	11,395,826	Russia, Denmark, Sweden, Norway, England.
Sweet oil.....	5,679	283,950	Russia.
Linseed-oil.....	1,894	56,820	Norway.
Other oil.....	137,503	4,654,476	Russia, Denmark, Sweden, Norway, England, Netherlands.
Palm-oil.....	3,482	142,316	Norway.
Fish-oil.....	6,327	234,099	Russia.
Paraffine and stearine.....	365	23,725	Do.
Tallow.....	391	16,422	German ports.
Lard.....	11,756	493,752	Russia.
Other animal grease.....	36,930	259,499	Denmark, Sweden.
Paper and paper-board.....	31,407	1,072,500	Denmark, Sweden, Russia, Norway, England.



Statement showing the exports from Stettin, &amp;c.—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Cwt.</i>	<i>Marks.</i>	
Furs .....	234	35, 100	Russia.
Gunpowder .....	2, 807	252, 630	German ports.
Silk and silk goods .....	746	873, 000	Russia.
Soap and perfumery .....	14, 781	392, 520	German ports.
Millstones, &c. ....	10, 514	63, 084	Russia, Sweden.
Slate .....	4, 718	14, 154	Russia, Denmark.
Slate, framed .....	5, 298	105, 900	Russia, Sweden.
Other stone .....	97, 282	389, 128	Russia, Sweden, Denmark, Norway, Eng- land.
Stone-ware .....	4, 980	149, 400	Russia, Sweden, Denmark.
Coal .....	576	403	Norway.
Mats and straw ware .....	1, 228	49, 120	Russia.
Tar and pitch .....	29, 887	298, 870	Russia, Denmark, Sweden.
Asphalt .....	2, 145	8, 580	Russia, Sweden.
Roofing felt .....	27, 683	276, 830	Russia, Sweden, Denmark.
Resin .....	6, 049	48, 392	Do.
Petroleum .....	13, 572	149, 292	Russia.
Other tar and mineral oil .....	3, 416	51, 240	Russia, Sweden, Denmark.
Resin and turpentine oil .....	2, 197	54, 925	Sweden, Norway, Denmark, England.
Animal products .....	328	28, 746	Russia, Denmark.
Bladder .....	396	15, 840	German ports.
Wax .....	1, 810	253, 400	Russia, England.
Sponge .....	65	23, 400	Denmark.
Bricks and tiles .....	323, 627	97, 088	Russia, Denmark, Sweden, Norway, Neth- erlands.
Clay-ware .....	10, 501	165, 336	Russia, Denmark, Sweden.
Porcelain .....	8, 598	515, 880	Russia, Denmark, Sweden, Norway.
Oil-cloth .....	491	54, 010	Russia.
Wool, raw .....	6, 574	1, 183, 320	Russia, Denmark, Sweden, England.
Woolen, yarn .....	1, 596	478, 800	Russia, Denmark.
Woolen goods .....	2, 483	931, 125	Do.
Zinc .....	137, 135	3, 428, 375	Russia, Denmark, Sweden, England, Nor- way, France, North America.
Zinc, in plates .....	26, 326	737, 128	Russia, Denmark, Sweden, Norway.
Zinc, manufactured .....	366	19, 032	Sweden.
Tin .....	329	24, 263	German ports.
Tin, manufactured .....	48	6, 000	Denmark.
Sundries .....	25, 857	775, 710	Russia, Denmark, Sweden, Norway.
Wheat .....	557, 486	5, 296, 117	England, Belgium, Denmark, France, Swe- den, Norway, Netherlands.
Rye .....	45, 347	283, 418	Denmark, Sweden, Norway, England.
Barley .....	853, 584	6, 401, 880	Russia, Denmark, Sweden, Norway, Eng- land, Belgium, France.
Oats .....	4, 421	26, 526	Denmark, England.
Maize .....	19, 830	138, 810	Russia, England.
Malt .....	88, 367	1, 104, 587	Russia, Denmark, Sweden, Norway.
All other kinds of corn .....	1, 766	12, 362	Denmark, Sweden.
Pulse .....	72, 870	510, 090	Russia, Denmark, Sweden, Norway, Eng- land, Netherlands.
Logs of hard wood, 29,392 ton- nen, at 90 marks. ....		2, 645, 280	Denmark, Sweden, Norway, England, Bel- gium, Netherlands, France, Africa.
Logs of soft wood, 19,711½ ton- nen, at 44 marks. ....		867, 306	Denmark, Norway, England, Belgium, Neth- erlands, France.
Boards and planks, 4,091 tonnen, at 66 marks. ....		270, 006	Russia, Denmark, Sweden, England, France.
Two young cattle .....		120	German ports.
Twelve pigs .....		792	Do.
Fifty-two sheep .....		1, 560	Do.
Fifteen vessels .....		44, 000	German ports, Russia.
Total .....	7, 722, 271	110, 228, 332	

*Statement showing the navigation at the port of Stettin for the year ending December 31, 1878.*

Flag.	ENTERED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Cubic meters.	No.	Cubic meters.	No.	Cubic meters.
Russian.....	10	9, 798	16	7, 324	26	17, 122
Swedish.....	98	86, 596	60	16, 951	158	83, 547
Norwegian.....	52	34, 498	143	92, 296	195	126, 794
Danish.....	131	107, 388	214	27, 423	345	134, 811
Netherlandish.....	24	26, 274	45	10, 832	69	37, 106
English.....	390	664, 058	205	63, 965	595	728, 023
French.....			7	3, 536	7	3, 536
Austrian.....			2	2, 925	2	2, 925
American.....			8	10, 633	8	10, 633
German.....	733	474, 775	1, 246	324, 915	1, 979	799, 690
Total.....	1, 438	1, 383, 387	1, 946	560, 800	3, 384	1, 944, 187

Flag.	CLEARED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Cubic meters.	No.	Cubic meters.	No.	Cubic meters.
Russian.....	10	9, 798	16	7, 324	26	17, 122
Swedish.....	101	68, 028	55	13, 611	156	81, 639
Norwegian.....	55	36, 648	142	89, 824	197	126, 472
Danish.....	132	108, 242	220	26, 281	352	134, 523
Netherlandish.....	23	24, 609	52	12, 800	74	37, 409
English.....	396	669, 772	197	61, 349	593	731, 121
French.....			7	3, 539	7	3, 536
Austrian.....			2	2, 925	2	2, 925
American.....			8	10, 633	8	10, 633
German.....	738	478, 472	1, 276	308, 992	2, 014	787, 464
Total.....	1, 454	1, 395, 569	1, 975	537, 275	3, 429	1, 932, 844

## WÜRTEMBERG.

*Report, by Consul Potter, of Stuttgart, on the sale of American goods in Würtemberg, and on the harvest and vintage of 1879.*

### CONTINUED TRADE DEPRESSION.

In the several annual reports which I have had the honor of transmitting to the Department since the year 1875, I have stated that the commerce and various industries of the Kingdom of Würtemberg were "unsettled and generally depressed." The depression still remains, but the people have become so accustomed to "dull times" that the term "unsettled" is no longer applicable to the condition of the trades and industries of the country. The wages of mechanics and laborers are still tending downward, while the cost of living, and many of the necessities of life, are, through the operations of the new imperial tariff and other causes, considerably higher. These facts added to another nearly total failure of the wine crop, resulting from much rain and a low temperature of the atmosphere during the summer season, have given a fresh impetus to emigration, and remind all classes of the necessity of becoming diligent students in the science of economy.

## EXPORTS TO THE UNITED STATES.

The following figures exhibit the condition of the export trade of Würtemberg with the United States for the past five years, ending June 30, 1879. The total declared exports for each of those years were as follows:

Year.	Value of exports.	Yearly decrease.	Per cent. of decrease.
1875 .....	\$1, 108, 283 80		
1876 .....	916, 651 33	\$201, 632 47	18.1
1877 .....	687, 796 71	218, 854 62	24.1
1878 .....	619, 675 75	68, 120 96	9.9
1879 .....	515, 137 56	104, 538 19	16.6
Decrease in 1879 as compared with 1875 .....			53.3

During the first month of the last quarter of the present year there was a considerable increase in the exportation of dried fruits, the figures representing which do not appear in the above table.

## IMPORTS FROM THE UNITED STATES.

As is well known, there is no separate record kept by the Imperial Government of imports into the individual states of Germany. The character and value of goods imported into Würtemberg cannot, therefore, be given. But from information carefully gathered I am able to report a large increase in the variety and value of articles brought during the past year into this kingdom from the United States. The trade in many articles of American manufacture, especially of tools and builders' hardware, could be increased almost without limit if the American manufacturer would carefully consult the tastes of the buyer and the popular style of architecture now prevailing among European builders. The quality and price of the American goods are entirely satisfactory. The patterns only, which could be easily modified, are generally objectionable.

As a matter of possible interest to the American exporter, the opinions of some of the largest importers here are further referred to, under the following heads:

*Builders' hardware, metal trimming for furniture, tools for woodworking, &c.*—There has been a large increase in the demand for American goods of this description. Articles embraced under this head have been but recently introduced here, by way of an experiment, which is likely to lead to a considerable trade, provided the American manufacturer will consult the wishes of the builders and dealers on the Continent as to style and pattern of goods. The senior member of a large importing house writes to this consulate as follows:

The tools are of most excellent quality and practical construction, and will, if this standard is not lowered, always hold their ground in Germany and meet with increased favor.

The reason why they are not now sold in greater quantities is, that in the greatest number of workshops the employers still furnish their workmen with tools, and do not buy those of finest and best quality, because the workmen do not take as good care of them as if they were their own property. Some of the less important employers, who work with their employees, and the better class of workmen purchase the American tools, but there is at present a want of paying employment, and the trade is therefore

The builders' hardware from America is most perfect in its workmanship and finish, but is, in most cases, unsuitable to the German demand, because the manner of building and the construction of furniture here differ from the American methods.

There is a great deal of fine hardware used here in building, but the American articles in this branch display a want of style in the designs, *i. e.*, they do not appear to be intended for any particular order of architecture. This fact greatly hinders their sale on the continent.

The present prevailing style of architecture in Germany is the German renaissance. Models and drawings in this "genre" could be readily obtained from our architects, but, as far as we know, no American manufacturer has as yet made an effort to fulfill our requirements. Perhaps this may be accounted for by the fact that the American manufacturer rarely deals directly with the German merchants and consumers, but nearly always through the mediation of the *importers*, who care little for the specialties of the market, but only seek to dispose of large quantities of goods.

The new imperial tariff, of course, increases the cost of iron goods, but the chief addition to the cost of American goods consists in the very high charges for handling, shipping, and transportation, which, in many instances, *exceed the invoice cost of goods*. This might be corrected with great advantage to the American exporter.

The English manufacturer delivers his wares generally on board, while in America high charges are reckoned for shipment. The charges for packing are also much greater than the real cost, except in case of *original packages*.

Returning to transportation, the route, via Antwerp and Rotterdam (Rhine to Mannheim), would be much more advantageous for Southern Germany than via Bremen or Hamburg. The minimum rates of these lines, however, are yet too high for small consignments.

*Geese feathers and hair for mattresses.*—Samples of these articles were imported and met with so much favor in this market that additional orders, to a considerable amount, were sent to the United States. The first invoices gave entire satisfaction, and a trade of much importance was thought to be certain. Importers, however, complain that goods received in answer to subsequent orders were *badly adulterated with inferior materials*, and the trade, as a consequence, is, I am sorry to say, for the present wholly suspended.

*Hickory handles for tools.*—The importation from the United States of this class of manufacture has been quite large and was rapidly increasing until within a short time, when it was checked by the operations of the American manufacturer or shipper, who, as it is alleged, sought to increase his profits, when the demand for his goods became active, by sending an article greatly inferior to that ordered and paid for. One extensive dealer who imported from 25,000 to 50,000 handles per year, writes to this consulate as follows:

I do not find the direct import from the ——— in North Carolina, advantageous, because the greater portion of the handles were not made in the form ordered. Further, in the last order received there were several boxes of *second quality*, mixed with those of the first quality ordered. The amount of the bill had already been paid to the agent of the company before the goods were delivered here. As redress in a case of this kind is difficult, it is not advisable to longer continue the import, for the consequence of such occurrences will not only result in a direct loss of money to me, but a loss of my custom as well.

It is of the highest importance that the American exporter should maintain a strict and uniform standard in the quality of goods he sends to the Continent of Europe. The people are poor and closely scrutinize every article of use which they purchase, before they part with their scanty earnings. The Continental merchant is obliged, therefore, to be sensitive, and will not submit to any trifling with the quality of his purchases. A little "sharp practice" on the part of a single exporter may result in infinite injury to other scrupulous and honest shippers, by sowing the seeds of prejudice in an entire district which was previously well disposed toward American productions.

*Glassware.*—The popularity of American flint pressed glass is steadily increasing. Its beauty and general superiority to European glass is now freely recognized by all dealers in this part of Germany. The new imperial tariff but slightly affects this article.

*Small American machines for farm and domestic use, ironware, kitchen*

*utensils, lawn-mowers, garden-engines, and pumps.*—Articles of this description are received with favor wherever introduced, and the demand for them has largely increased during the past year. The new imperial tariff has caused an advance in the price of these goods, but will not affect the demand for them in Germany, as there is no substitute which will compare with them in quality and practical usefulness.

*Jewelry and fancy articles.*—It is a surprising fact that goods of this description are now imported from the United States in large quantities by dealers in Germany, who, until a recent date, have been chiefly engaged in supplying America with similar articles of luxury. Fancy rubber goods in great variety, gold and aluminium pencils, gold pens, lockets, and rings, chains, cast-iron in combination with glass, inkstands, and many other specialties, are found in nearly all of the better class of shops here, while the export of jewelry to the United States from Pforzheim and Hanau (the two great jewelry centers) has substantially ceased.

A few facts regarding the former importance of this export trade, and the apparent causes that led to its decay, may be of interest. The volume of business between the United States and Southern Germany in this particular branch has, in the past, been very large, and seems to have reached its greatest dimensions in the year 1873, when it suddenly began to decline in such a rapid manner that, of more than a dozen firms engaged in this line of business, only two or three now remain, and even these are compelled to manufacture in the United States or be driven out of the market altogether.

For various reasons Germany can no longer compete with New York, Newark, and Providence in the manufacture of jewelry suitable for the American trade.

The period immediately following that of the great American rebellion created an immense demand for all articles of virtu in the United States, foremost among which was that of jewelry of every description. Germany, being an old manufacturing country, became a very large contributor to the demands of the United States, and remained so as long as cheap labor alone was the important factor in producing marketable wares; and, although the United States impose a duty of 25 per cent. advalorem upon all jewelry brought into the market, the German manufacturers were, nevertheless, able to compete with the American producers.

The great demand for this class of goods, however, stimulated the American manufacturers to produce new and ingenious inventions in machinery, which took the place of hand labor. At the same time the continually growing competition stimulated manufacturers to emulation until they produced articles superior in taste, workmanship, and style to the European goods, and at less relative cost.

This rivalry among American manufacturers did not cease with the decline of business, which virtually commenced in the fall of 1873. On the contrary, it seemed to stimulate them to renewed efforts, until now they have no superiors in the art of manufacturing jewelry.

As a natural consequence of the decline in trade, the price of labor began to fall correspondingly, and has continued in its downward tendency until it has reached as low a figure, probably, as in any other manufacturing country that could compete with the United States in the production of jewelry.

With the greatly reduced price of labor, and the continual introduction of new labor-saving machinery, New York, Newark, and Providence (the three great jewelry manufacturing points) made great progress in

the production of fine goods. Germany, on the other hand, introduced but little new machinery, and, in some instances, where a few of the more enterprising manufacturers did attempt to improve their productions by using tools similar to those used in the American workshops, they were met by such decided opposition on the part of their workmen that they were compelled to discontinue their use and again resort to old methods, under which the business has declined to a mere fraction of its former importance.

With no important improvements in tools and machinery, and in the absence of cultivated and refined taste in the designs of a large portion of their goods, it was impossible for German manufacturers to longer retain their former position in the markets of the United States, and, as the result has shown, they are now buyers instead of sellers, and take their lessons in artistic manufacture from the younger apprentice, whose superior genius and skill has been developed by adhering to liberal and progressive ideas in his relations to men and the business he controls.

*American Waltham watches* are increasing in popularity in this part of Germany, and, though they cost more than European watches, yet a large number of them are sold. One of the most extensive importers writes to this consulate as follows:

The works of the Waltham watches are of excellent quality and preferable to those of any other country, on account of their more perfect and easy regulation, and because of ingenious and important improvements in the construction of the separate parts of the watch. They are, however, still too dear for importation in great quantities. In consequence of these facts we have been obliged to have the cases made in Switzerland, in order to keep the price of the finished watch within moderate limits. We also have the dial-plates and hands made in Switzerland, as those made in America are too heavy and somewhat clumsy. We believe a Waltham watch, at the same price, a much superior time-keeper to those of the Swiss manufacturers, and we also think the American Watch Company has given more consideration to the demands of the German market than any other foreign manufacturers.

The German watchmaker is conservative, and holds to the Swiss watch by habit, and does not yet fully appreciate the merits of the American watch. The new German tariff affects this article but slightly.

What has been said here concerning American watches refers only to watches for gentlemen. The demand for ladies' watches here calls for a watch of 13 to 14 lines in diameter, while the smallest American watches are from 15 to 16 lines, and the small works are also rather too thick, and should be flatter or thinner, and, if possible, cheaper.

*Fine paper and counting-house supplies, letter-scales, &c.*—The demand for these and many other articles of American manufacture in the stationery trade has largely increased during the past year.

The new German tariff is not likely to impede the importation of goods of this character.

*Cutlery, carpenters' tools, hay and dung forks, wrenches, hat and coat hooks, furniture-casters, bracket-supports, consols, knife-sharpeners, locks, and other light hardware* of American manufacture have been fairly introduced here, and, after tests, have proved to be so much superior to similar articles of German manufacture that the demand is likely to become large and permanent. One of the leading importers of such articles writes to this consulate as follows:

Different kinds of American cheap locks have been introduced here, but these will not meet with a large sale until they are made to conform more nearly to our patterns.

The cutlery of the United States is of high merit, and worthy of the price asked; but, latterly, efforts are being made in Germany to produce wares of as good quality for the same price.

American tools, light hardware, and agricultural implements sold by us are much superior in quality and form to the German manufacture, and for this reason the importation of such articles will not be seriously affected by the new tariff.

*American canned meats, fish, fruits, preserves, &c.*—The demand for these goods in this part of Germany has largely increased during the past year. The duty upon such articles was raised by the new tariff from 30 to 60 marks per 100 kilograms. It is expected that the sale of this popular food will be somewhat diminished under the influence of this heavy tax. If the American exporter will, however, be careful in sending *only prime quality* of canned goods to Germany the sale will continue to be extensive.

*Petroleum and lard* were formerly admitted free of duty. The new tariff imposes a tax of 6 marks on petroleum and 10 marks on lard per 100 kilograms. There will, however, be no decrease in the consumption and demand for these articles, as there is no substitute in Germany that will compare in quality and cheapness.

*Starch.*—The importation of American starch, which was largely sold in this market, is likely to be stopped under the operations of the new imperial tariff. One firm in this city, in a letter addressed to this consulate, says:

Our trade in American starch has been quite large, but under the new tariff we cannot compete any more with the German product, and will have to wholly abandon further import.

*Stoves.*—The importation of American stoves is not likely to be extensive, because the same kind of stoves, made after American models, are being manufactured in Germany and are about as good as the direct importations.

The difficulty in obtaining extra parts of imported stoves, to replace those broken, also constitutes an objection to the foreign article.

#### AGRICULTURE.

*The harvest in Württemberg in 1879 and the general state of the market.*—The grain crop of Württemberg for the present year may be rated as a good average in quantity and generally excellent in quality. If the number 100 be taken as the standard for an average yield, the harvest of 1879 will give the following results:

Wheat .....	104
Rye .....	98
Dinkel, or speltz .....	104
Barley .....	98
Oats .....	98

About 23 per cent. of the cultivated land of Württemberg was devoted to the raising of dinkel (*Speltz*), which is the best quality of white wheat grown in the world.

Of late years the millers, brewers, and dealers have drawn their supplies almost entirely from other countries, for the reason that they could not use, with profit, the home product on account of its inferior quality. This has been a severe drawback to the producers of Württemberg who, this year, because of the recent excellent harvest, occupy a much better position.

The potato crop, to which the people of Württemberg always look hopefully, has not fulfilled their expectations. Owing to the continuous rains, the potato disease has appeared, and in many parts the quantity hoped for has been much reduced. Great anxiety is felt as to the course of the disease after the crop is in the cellar, as the condition of the potato in the spring forms a chief figure in the regulation of the prices of grain.

The yield of fruit exceeds somewhat one-fourth of a crop, and the quality is generally poor.

This year's corn harvest in Württemberg has turned out much better than that of the preceding year, and there is, consequently, much less need of importing grain than has been the case for several years past.

Among European countries Germany has had decidedly the best harvest this year, and is, therefore, much less dependent on export countries than usual. All other countries in Europe have had comparatively poor crops. The countries upon which Württemberg relies for grain to supply her own deficiency are Austria-Hungary and Russia. The first has nothing, and the other but little to spare from home consumption, while England and France will be obliged to import largely.

According to the present state of the general market, America alone will have to make provision for the failing crops in Europe, a duty which its splendid harvest will fully enable it to perform.

Almost immediately after the harvest, the importation of grain into Württemberg commenced, and has increased from week to week. It will, however, probably shortly receive a check, as, owing to excessive speculation, prices have rapidly advanced to a figure which is unwarranted by any facts growing out of the condition of the crops or the laws of supply and demand.

This opinion is founded on the fact that, on the one hand, real want is not to be feared in Europe, and on the other hand, prices, raised still higher, will induce a degree of general economy, which will not be without influence on prices.

If provisions fall short towards spring, a further advance in price cannot be avoided, but in that case the causes of the rise will be based on more solid grounds than they are at the present time.

The hay and fodder crop of Württemberg, for the present year, was bountiful, but, owing to the extreme wet weather at the time of cutting, was housed in very bad condition.

#### THE GRAPE CROP OF 1879.

The people of Württemberg, who always look so hopefully to the product of their extensive vineyards, have again suffered a heavy disaster in the nearly total failure of the grape crop. The prospects in the early spring were promising, but the excessive rains and low temperature of the season, were, at an unusually early day, productive of mildew upon the grapes. The patient vintager was diligent in the application of remedies, which generally was smoking the vines with sulphur. Then came, in some districts, that terrible pest, the phylloxera. The hopes of the vintager, however, did not fail him, until the frost came, and withered the vines while the fruit was yet green, suddenly revealing to him another years' labor lost.

The frequent failure, during the last ten years, of the wine crop in Württemberg would seem to indicate that her "vine-clad hills" need to be restocked with a new and more hardy variety of vines, whose fruit will mature earlier in the season, and, at the same time, resist the attacks of the invisible phylloxera. It is difficult to suggest any other locality than America in which to look for such vines. It would require but a short time, comparatively, to import desirable American varieties, and from these raise seedlings that would mark a new and successful "departure" in the experience of the vintagers of Württemberg.

In consequence of the failure of the grape crop this year, the price of native wines has advanced about 20 per cent.

J. S. POTTER.

UNITED STATES CONSULATE, *Stuttgart, November 1, 1879.*



**THE NETHERLANDS.**

*Report, by Consul Eckstein, of Amsterdam, on the commerce and industries of the Netherlands for the year ending June 30, 1879.*

**INTRODUCTORY REMARKS.**

The trade, commerce, and financial operations of this city and port, as well as of the Netherlands in general, considered in their totality and viewed from their effects upon the general prosperity of the country and its people, have been far from satisfactory during the year ending June 30, 1879.

As far as traceable, this fact does not seem to be owing to any cause or causes arising from any particular and unfortunate or untoward event or events of an internal character, but solely, as it would appear, from the effects of a combination of surrounding or external circumstances; in other words, through the long-existing unsatisfactory condition of many important interests of the various larger countries of Europe and in other hemispheres.

For more particular information on the subject, I respectfully beg to refer to the details of this my report hereby submitted under various heads, as follows:

**CROP PROSPECTS IN 1879.**

The protracted winter of 1878-79 gave much reason to fear that a good deal of the winter-grain would have to be plowed up. Fortunately this fear proved to be unfounded.

In May grain crops in general had a very promising appearance in the fields, but the unusual cold weather and frequent rain in June and July give reason to fear that only a middling crop will be harvested.

In the spring there was but little grass for the cattle, but later there was great abundance. The hay-fields are also well covered, but the unfavorable weather greatly impedes the harvest, so that the quality of early mown hay is much impaired.

The early potatoes yielded a plentiful crop, and the prices are moderate. Fruit-trees were well loaded, but had much to suffer from the late gales.

The health of the horses and cattle is highly satisfactory.

**FLOWER-ROOTS—BULBS.**

Bulb-growing at Haarlem and in its vicinity is carried on to as great an extent as ever. There are about fifty firms making the growing and exporting of bulbs their exclusive business; in addition thereto, a much larger number of people, engaged in some other trade or employment, devote a portion of their time to this branch of horticulture, on a smaller scale and principally for the home market, although some of them also export bulbs to other countries. The area of land under cultivation for this purpose is estimated at about 1,200 hectares, equal to rather more than 2,965 acres.

The land best adapted for the cultivation of hyacinths is located in the immediate vicinity of Haarlem, and nearly 250 hectares, or 618 acres in extent; the value thereof is estimated at 24,000 florins per hectare, or \$3,885 per acre.

About 950 hectares (2,347 acres), representing a value of from 20,000 to 24,000 florins per hectare (\$3,237 to \$3,885 per acre), are employed for the cultivation of tulips, crocuses, anemones, narcissuses, lilies, &c.

Nearly 3,000 persons are employed in the bulb-growing business. The export of bulbs to other countries during the past year amounted to about 2,500,000 florins or \$1,000,000. The exports to the United States were very small, as compared with those to other countries, amounting to only 75,000 florins or \$30,000.

As the principal cause why the exports of this article to the United States are so very limited, as compared with those to Great Britain, France, and Germany, the bulb-growers point to the high rate of duty levied thereon in America.

The exports of bulbs in 1878 were less than in previous years, on account of the crop having been generally poor, as well as through the prohibition to import flower-roots into Italy and Spain. This year, however, there are prospects of a superior crop and an increased trade.

In the cultivation of hyacinths only cattle-manure is used at a cost of about 1,200 florins per hectare, or \$194 per acre, whereas ordinary manure, at about one-fourth of the expense, does equally well for all other kinds of bulbs.

#### THE GRAIN TRADE.

The year 1878 was not a favorable one for the grain trade, inasmuch as it was notable for a constant downward tendency in prices. The late war in Turkey had the effect of temporarily exciting to extensive speculations, but it soon became apparent that the course of business in 1854-'55, which had momentarily been regarded as a precedent, was not applicable now, so that the reaction proved the more disastrous when, in consequence of the raising of the blockade in the Black Sea, the accumulated quantities of Russian grain were suddenly thrown upon the markets of Western Europe.

The opinion prevails here now that the year 1878 has shown that under ordinary circumstances the United States will henceforth be able to supply Europe with breadstuffs, even should an interruption in the intercourse with Russia at any future time occur. It is now also generally believed that as long as the grain crops in the United States turn out in any way favorable, and the export hither continues to be well regulated, breadstuffs will hereafter always be procurable here at moderate rates.

It is worthy of remark, however, that it was in some measure owing to the uncommonly low rate of freights then prevailing that American grain could, in 1878, be sold here at such a low figure.

The prices realized for American wheat in 1878 were as follows (freight to this port included):

	Florina per 2,400 kilos.
January .....	330
March .....	320
April .....	315
May .....	310
June .....	275 to 295
July .....	270 to 280
August .....	280
September .....	275
October, November, and December .....	280 to 285

2,400 kilograms being equal to about 47 cwt. 1 quarter avoirdupois.

Some transactions have taken place, and a few contracts have been closed for cargoes of new wheat to be shipped at New York in August and September of the present year, at prices ranging from 284 to 300 florins per 2,400 kilograms.

A constantly increasing market for American wheat seems now to have been secured in this country, as the millers here recognize and highly value certain superiorities which it possesses.

*Statement showing the imports of grain at Amsterdam during the years 1877 and 1878.*

[Quantities in hectoliters.]

Imported from—	Rye.		Wheat.		Barley.		Buckwheat.		Pease.	
	1877.	1878.	1877.	1878.	1877.	1878.	1877.	1878.	1877.	1878.
Russia .....	968,903	762,658	77,085	162,820	21,709	102,978	.....	5,305	.....	.....
Germany .....	33,846	38,046	139,384	165,340	24,576	53,522	8,189	15,485	22,169	15,475
Denmark .....	.....	.....	.....	1,440	2,700	1,860	.....	.....	.....	.....
England .....	.....	.....	123,254	69,290	.....	.....	.....	.....	.....	.....
France .....	.....	.....	.....	.....	2,280	.....	.....	.....	.....	.....
Danubian principalities .....	16,800	176,370	.....	53,269	10,950	34,770	.....	.....	.....	.....
Turkey .....	3,187	5,000	.....	.....	7,500	.....	.....	.....	.....	.....
United States .....	9,370	90,450	25,620	102,538	.....	.....	.....	.....	.....	.....
East Indies .....	.....	.....	.....	17,795	.....	.....	.....	.....	.....	.....
Japan .....	.....	.....	.....	660	.....	.....	.....	.....	.....	.....
Portugal .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
Total .....	1,032,166	1,072,524	365,343	573,152	69,715	193,130	8,189	20,790	22,397	15,628

#### TIMBER.

The timber trade during the year 1878 is represented by importers and dealers as having been unusually dull and unsatisfactory. The prices for all kinds were low; Norwegian, Swedish, and Finland dressed logs could hardly be sold at fair prices.

The imports of American dressed logs (pitch pine) were about the same as those of the preceding year; the low price at which they can be sold renders them available for shipbuilding, as well as for other purposes, and the trade therein promises to increase.

About the same number of masts were imported as in 1877, but there were not so many sold.

American dressed logs are frequently fitted and used for masts, and can be had at a much cheaper rate than Riga masts.

The sales of American oak-staves were rather considerable. The imports from the United States were as follows: Dressed logs, 1,770 in 1878 against 1,526 in 1877; oak-staves, 77,413 in 1878 against 75,472 in 1877; deals, 5,226 in 1878 against 32,268 in 1877; masts, 68 in 1878 against none in 1877.

The entire imports of timber of all kinds were brought to this port in 218 vessels, of which 83 came from Baltic ports, 81 from Sweden and Finland, 50 from Norway, and 4 from the United States.

#### TOBACCO.

If the sad course of business during the year 1878 in so many an article of commerce was attributable to the unfavorable state of politics and of political economy in a great part of Europe, the disappointments in

the Dutch tobacco markets owed their origin chiefly to the failure of the 1877 Java crop, which, both as to quality and quantity, was far inferior to what may be expected in moderately good years.

The smaller imports from Manila, Rio Grande, &c., likewise co-operated to limit transactions to a comparatively small amount. Under these circumstances there was the more occasion to appreciate the good result of the considerable 1877 Sumatra crop, which gave to the tobacco market the relief it so much required.

The plans pending in Germany, at one moment tending to create a government monopoly, at another to raise the duty on tobacco with more or less protection to the produce of that country, had at the close of the year not come to maturity, and this state of uncertainty occasioned a considerable rise in the value of all middling and inferior sorts falling within the classes, inside covers, fillers, &c.

The following figures will tend to show the importance of the last eight Java and Sumatra crops:

*Statement showing the tobacco crop of Java and Sumatra for eight years, the quantities produced, the average price per half kilogram realized, and the total value of the said crops in each year.*

	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.
Java crop..... packages*	106,970	129,000	207,351	240,006	179,328	182,177	191,868	146,576
Sumatra crop..... do .....	3,114	3,922	6,409	9,238	12,811	15,147	28,947	36,167
Total .....	110,084	132,922	213,760	249,244	192,139	197,324	220,815	182,743
Average price for Java crop, Dutch cents per $\frac{1}{2}$ kilogram .....	62	74	56	59	78 $\frac{1}{2}$	50	54	32
Average price for Sumatra crop, Dutch cents per $\frac{1}{2}$ kilogram .....	122	127	132	182	154	172	156	128
Amount realized from Java crop, millions of florins .....	10 $\frac{1}{2}$	15 $\frac{1}{2}$	18 $\frac{1}{2}$	22 $\frac{1}{2}$	23	14 $\frac{1}{2}$	16 $\frac{1}{2}$	8
Amount realized from Sumatra crop, millions of florins .....	$\frac{1}{2}$	$\frac{3}{4}$	1	2 $\frac{1}{2}$	3	8 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$
Total .....	11	16 $\frac{1}{2}$	19 $\frac{1}{2}$	25	26	17 $\frac{1}{2}$	22 $\frac{1}{2}$	14 $\frac{1}{2}$

\*A package usually weighs from 50 to 80 kilograms.

The variation in the above figures, showing the amount of tobacco produced, is exclusively occasioned by the more or less favorable result of the harvests. In 1878, however, a much smaller quantity of tobacco was cultivated. The almost total failure of the 1877 crop, added to the great losses sustained on most of the articles of import and export, caused a crisis in Java, the consequence of which was that many of the tobacco plantations, through the want of working capital and credit, could not be brought into cultivation. This state of matters, however, is but temporary, and in 1879 already the cultivation has again increased.

The production in Sumatra has progressed almost regularly from year to year.

Java and Sumatra tobacco is almost, without an exception, consigned to and sold in Holland for the account of the planters. After a great deal of uncertainty as to the most expedient system of sale for the sellers, it has at last been shown that, when the crops turn out well or even middling, the sale in large quantities by tender is best calculated to insure high prices, whereas, when the crops are inferior, the sale by auction is to be preferred. And this course has also been adopted during the last two years.

The trade in American tobacco has hitherto taken but a very insignificant place in the Amsterdam market, as the following figures will show with regard to two kinds, viz:

	Maryland.	Kentucky.
	<i>Casks.</i>	<i>Casks.</i>
Stock on hand January 1, 1878.....	474	278
Imports during the year.....	7,465	1,107
Sales during the year.....	5,850	941
Stock on hand January 1, 1879.....	2,089	444
Imports to June 30, 1879.....	2,503	112
Sales to June 30, 1879.....	2,344	201
Stock on hand July 1, 1879.....	2,248	355

Some little improvement is, however, already perceptible; also seed-leaf, although imported for the greater part indirect, has latterly found more favor in this market. It may be here remarked that the figures of imports and sales of American tobacco would have quite a different appearance, if those parcels were added, which are sorted out and rejected in supplying those countries where the government monopolizes the tobacco trade; such parcels must, of course, be re-exported from the said countries and most of them find their way to the Netherlands. In the statements of imports the said indirectly imported quantities are not taken notice of, although they are sold and used in this country.

It is to be expected that the introduction of the new tariffs, whereby a very high duty is imposed on tobacco in Germany, Switzerland, and Belgium, will benefit both Amsterdam and Rotterdam. In no other country than the Netherlands will it then any longer be possible to have a market, where tobacco can be received, manipulated and sorted, to supply the requirements of other countries, without fiscal interference; this, added to the well-known great financial and moral power of the Amsterdam tobacco market, must necessarily tend to conduct the stream of American tobacco exports to the Netherlands, the land of free trade.

I further transmit with this report a statement showing the sales of East Indian tobacco at the markets of Amsterdam and Rotterdam during the year 1878; as well as a statement showing the extent of the commerce in American, East Indian, and other tobacco at Amsterdam during the year ending December 31, 1878.

#### PETROLEUM.

During the year 1878 business in this article was of considerable importance. The consumption was very large and always on the increase. Prices were low and gave rise to many important transactions, for the most part on delivery at fixed periods.

In consequence of the low quotations in America, where the total exports, however, were much less than in 1877, prices, with the exception of a short interval of improvement, were continually on the decline. In January, 15½ florins per 100 kilograms could be obtained for immediate delivery, but in December, prices had gone back to 11 florins.

The imports from America, direct, amounted to 124,622 casks, against 52,650 in the previous year, and notwithstanding the very imperfect communication by water between Amsterdam and the Rhine, this market proved to be able to sell large quantities, although with some little sacrifice in the price, as compared with neighboring ports, whose means of communication are superior to those of Amsterdam.

The following is a statement of the quantity of petroleum discharged at the Amsterdam petroleum stores from 1872 up to the present time :

	Casks.
1872 .....	37, 817
1873 .....	29, 264
1874 .....	59, 012
1875 .....	92, 654
1876 .....	65, 507
1-77 .....	63, 500
1878 .....	125, 553
1879, first six months .....	55, 794

These figures include also the indirect imports via Antwerp and Rotterdam. The direct imports in 1879 promise to be much larger than in any previous year.

Since the commencement of 1879, prices, both for immediate and future delivery have, excepting occasional fluctuations of no significance, sustained a continual decline. On the 1st of January the quotations were from 10½ to 10 florins, but on the 30th June not more than from 9 to 8½ florins could be obtained.

This decline is attributable, not so much to an excessive stock in Europe as to the incessant and considerable offers in America. It is true that the stock on hand has increased since last year, but not in comparison with the increase of consumption.

The stock at Amsterdam on January 1, 1879, as compared with that on January 1, 1878, was as follows :

	January 1, 1879.	January 1, 1878.
	Casks.	Casks.
Cabind .....	34, 044	10, 737
Imported, January to June .....	55, 794	40, 545
Total .....	89, 838	51, 282
Delivered, January to June .....	58, 778	36, 178
Stock June 30 .....	31, 060	15, 104

#### DIAMONDS.

Although the diamonds and other precious stones, rough and in their various forms of perfection, that are manipulated at Amsterdam in the course of a year represent many millions in value, they do not figure correspondingly in the statistics of exports, for this reason: that many of the principal diamond cutting and polishing establishments in this city work chiefly for English and French houses, and of late years also for several firms at Hamburg. Actual sales of this article are therefore far more important at London, Paris, and Hamburg than in Amsterdam.

This branch of industry, which gives remunerative employment to about 4,000 workmen, was not so prosperous during the last twelve months as it has been in previous years, chiefly because the trade in rough as well as polished diamonds yielded no profits. The rough material, as imported direct from Kimberly (Cape of Good Hope), as well as the various kinds of cut and polished diamonds, were, in most cases, sold at a loss. Besides which the decline in the price of the rough article did not keep equal pace with the polished stones, making it very difficult for the manufacturer to keep his men regularly employed. Notwithstanding this, however, new factories are continually opened, to which circumstance the less favorable results may, perhaps, in some measure, be attributed.

There are now upwards of thirty of these establishments, large and small, in this city. The rate of wages, too, has undergone considerable reduction, owing partly to the continually increasing number of workmen, and partly to the prevailing dullness in this branch of trade.

#### BANKS—JOINT STOCK COMPANIES.

The following are some of the principal banks and joint-stock companies at Amsterdam, with the amount of their working capital and the dividends paid thereon in 1879 :

Names.	Capital stock.	Dividends.
	Florins.	Per cent.
Bank of the Netherlands .....	16,000,000	25 $\frac{1}{2}$
Surinam Bank .....	700,000	5
Amsterdam Bank .....	6,000,000	6 $\frac{1}{2}$
Netherlands India Commercial Bank .....	12,000,000	7
Netherlands Trading Society .....	35,963,000	5
Twent Banking Association (B. W. Blydenstein & Co.) .....	4,870,000	6
Bank of Paris and the Netherlands (Amsterdam Branch) .....	62,500,000	10

\* Francs.

#### BANK OF THE NETHERLANDS.

The capital stock of this institution is divided into 16,000 shares of 1,000 florins each; at the close of the fiscal year, March 31, 1879, in the hands of 2,721 shareholders, of whom 871, each having at least 5 shares, were entitled to vote at the general meetings. Acting as agent for the government, this bank has the exclusive privilege of issuing bank notes, of which the average circulation in the said year amounted to 188,288,663 florins. During that period it discounted bills of exchange and other commercial paper to an amount of 401,517,363 florins, granted loans on government and other securities to an amount of 203,300,985 florins, and on merchandise and other goods to an amount of 34,285,830 florins. The rate of interest charged thereon varied as follows :

Dates of alteration.	Rate of discount on—		Rate of interest for loans on—			
	Bills of exchange.	Promissory notes.	Securities.		Goods.	Bullion.
			Home.	Foreign.		
August 26, 1875 .....	3	3 $\frac{1}{2}$	3	3 $\frac{1}{2}$	3	1
April 10, 1876 .....	3	3 $\frac{1}{2}$	3	4	3	1
May 2, 1878 .....	3 $\frac{1}{2}$	4	3 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	1
October 9, 1878 .....	4	4 $\frac{1}{2}$	4	5	4	1
February 5, 1879 .....	3 $\frac{1}{2}$	4	4	5	4	1

The results of the fiscal year were most satisfactory. While trade and industry continued to experience the heavy dullness of the times, this institution enjoyed a season of more than usual prosperity. Neither were its profits derived from the unnecessary raising of the rate of discount or interest, as the above statement plainly shows; but, faithful to its calling it has used all its efforts to strengthen and support others and saved many from great losses, as well as promoted the development of business, combining general benefit with the interests of its shareholders, thereby increasing its popularity and extending the circle of its labors from year to year.

## NETHERLANDS INDIA COMMERCIAL BANK.

The following is a statement of the profits realized and the dividends paid by the said bank since the date of its constitution :

Year.	Paid-up capital.	Total of net profits.	Dividend paid per share.	Per cent. on capital.
	<i>Florins.</i>	<i>Florins.</i>	<i>Florins.</i>	
1864 .....	1,500,000	99,288.78½	3.88	6.21
1865 .....	3,000,000	165,762.53	6.74	5.39
1866 .....	3,925,000	261,026.17	10.20	6.24
1867 .....	6,000,000	310,810.34½	12.83	5.13
1868 .....	6,000,000	364,669.64	14.50	5.8
1869 .....	6,000,000	255,248.17½	10.50	4.20
1870 .....	6,000,000	223,409.26	9.25	3.7
1871 .....	6,000,000	240,004.55½	10.00	4
1872 .....	6,000,000	582,471.34	21.25	8.50
1873 .....	6,000,000	473,486.21	17.50	7
1874 .....	6,000,000	729,045.28½	25.00	10
1875 .....	6,000,000	900,461.93	30.00	12
1876 .....	12,000,000	1,246,520.77	22.50	9
1877 .....	12,000,000	917,719.80½	17.10	6.84
1878 .....	12,000,000	945,136.01½	17.50	7

So that the dividend paid to the shareholders on the paid-up capital during the said years has averaged about 7 per cent.

This bank has lately entered into intimate connection with the United States of America, with the special object of opening credit accounts in the principal cities of the new world, in order to import staple produce from Java, and, in so far as the course of business may lead thereto, also from other eastern countries. For this purpose the firm of Blake Brothers & Co., of New York and Boston, on a personal application thereto by one of the good friends of the board of directors, has consented to act as agent to the Netherlands India Commercial Bank. The excellent reputation of this firm, proverbial for its prudence and circumspection, is a guarantee to the board in the transaction of business not so directly under its control.

The directors of this bank have been led to take this step by the consideration that, on the penalty of being doomed to idleness, this institution must necessarily continue to be a link in the commerce of the world, and constantly direct its attention to the extending and confirming of its commercial relations, and that, true to its principle of abstaining, as far as possible, from trading on its own account, it must exert all its influence and endeavors to develop and promote the trade of the Netherlands and its colonies, even though the produce of the latter should find its way and be conveyed to other markets than those of the Netherlands and to other ports than Amsterdam.

## NEW LOANS NEGOTIATED AT AMSTERDAM.

Since the 1st of January, 1879, the following securities have been placed at Amsterdam, viz:

Names.	Rate of interest.	Amount.	Price.	Remarks.
	<i>Per cent.</i>		<i>Per cent.</i>	
P. r. u. g. e. s. e. loan, sixth series. ....	6	£407, 140	95½	Redeemable at par, ½ per cent. per annum.
Dutch Railway Company .....	4	Fl. 2, 500, 000	95½	Redeemable at par in 50 years.
Oregon and California Railroad Company. ....	6	\$1, 700, 000	85½	
City of Brussels .....	3	Frs. 65, 600, 000	96½	Redeemable at par in 66 years.
Netherlands-Westphalia Railway Company. ....	4½	Fl. 4, 000, 000	92	Redeemable at par in 60 years.
Dutch-Rhenish Railway Company, fifth series. ....	5	£100, 000	100	Redeemable at par January 1, 1899.



A considerable amount of the above securities have been taken by Dutch investors, besides which several millions of Russian, as well as Austrian interior debt, found purchasers at the Amsterdam market.

#### AMERICAN SECURITIES.

The resumption of specie payments in the United States, and the successful conversion of so large an amount of its high-interest-bearing bonds into bonds paying only 4 per cent., have not failed to excite the admiration and respect of bankers, capitalists, and others throughout Holland, and these operations are generally regarded here as exemplary national achievements.

The new 4 per cent. bonds, however, have not as yet found much favor with investors in this country, the rate of interest being considered too low; but, on the other hand, it is generally allowed that no investment can be more safe. I am therefore inclined to believe that to conquer the as yet prevailing reluctance is merely a matter of time, and that those very 4 per cent. bonds will eventually become a favorite investment here. It appears to me that the present objection arises mainly from the fact that the Dutch public—so conservative in all things—has not yet become sufficiently reconciled to bonds at 4 per cent. issued by a state that so recently paid them 5 and 6 per cent. for their money. It should perhaps also be stated that many of the millions of dollars realized by Dutch capitalists and investors through the redemption of 5 and 6 per cent. United States bonds, have been applied to support the market for Russian securities, wherein the Dutch people in general are so largely interested.

It is hardly possible to make a correct estimate of the amount of American securities (exclusive of United States bonds) held in Holland at the present moment. It has greatly decreased within the last twelve months, but what yet remains of such securities in this country may still be assumed to exceed \$100,000,000.

The very promising prospect of a revival of commerce and industry, and of a speedy return of prosperity in the United States, as well as a generally-increasing confidence, has, in the course of the last year or so, had the effect of considerably raising the market value of many formerly depreciated and "suffering" American railway securities. Large numbers of these, to the amount of many millions of dollars, held by Dutch owners, have been bought up in this market for the account of American bankers and capitalists.

The great losses sustained and the many disappointments experienced by the Dutch people, who were in former years so largely interested in all sorts of American enterprises, have of late had the effect to make them look with a considerable degree of suspicion upon American industrial investments in general, and especially upon railway securities. It is therefore but natural that, whenever large orders for American account cause an advance on the quotations of several years past, as has recently been the case with several kinds of American railway shares and bonds, they take advantage of the opportunity offered to them, and dispose of them without loss of time.

*Rates of exchange at Amsterdam during the year ending June 30, 1879.*

	On London.	On Paris.	On Frankfurt.
	<i>Per £ sterling.</i>	<i>Per 100 francs.</i>	<i>Per 100 marks.</i>
July, 1878: sight	12.02½ to 12.06½	47.80 to 48.10	58.80 to 59.30
Two months' date	11.94 to 12.00	47.50 to 47.60	58.35 to 58.60
August, 1878: sight	12.03½ to 12.09	47.95 to 47.95	58.85 to 59.00
Two months' date	11.97 to 12.00	47.60 to 47.60	58.40 to 58.50
September, 1878: sight	12.08 to 12.12	47.80 to 47.95	58.85 to 59.00
Two months' date	11.98 to 12.00	47.50 to 47.60	58.40 to 58.45
October, 1878: sight	12.08 to 12.13	47.80 to 47.95	58.85 to 59.10
Two months' date	11.98 to 12.00	47.40 to 47.50	58.25 to 58.40
November, 1878: sight	12.08½ to 12.11	47.75 to 47.95	58.85 to 59.20
Two months' date	11.97 to 12.00	47.40 to 47.40	58.25 to 58.30
December, 1878: sight	12.09½ to 12.15	47.80 to 47.90	58.95 to 59.2½
Two months' date	12.00 to 12.02	47.40 to 47.40	58.30 to 58.40
January, 1879: sight	12.08½ to 12.14	47.80 to 47.95	58.95 to 59.15
Two months' date	11.98 to 12.02	47.40 to 47.65	58.45 to 58.50
February, 1879: sight	12.05½ to 12.10	47.80 to 47.95	58.95 to 59.15
Two months' date	12.00 to 12.01	47.50 to 47.55	58.50 to 58.60
March, 1879: sight	12.09 to 12.10½	47.65 to 47.90	58.80 to 59.00
Two months' date	12.02 to 12.03	47.35 to 47.50	58.40 to 58.55
April, 1879: sight	12.03½ to 12.07½	47.75 to 47.85	58.70 to 58.85
Two months' date	11.99 to 12.01	47.35 to 47.45	58.40 to 58.45
May, 1879: sight	12.02 to 12.04	47.75 to 47.80	58.70 to 58.90
Two months' date	11.97½ to 11.99	47.45 to 47.45	58.40 to 58.40
June, 1879: sight	12.03 to 12.04½	47.60 to 47.70	58.70 to 58.90
Two months' date	11.99 to 12.00	47.40 to 47.45	58.40 to 58.40

#### THE NORTH SEA CANAL, &C.

The following statements respecting the North Sea Canal, the timber dock, and the prospects of an improved water communication with the Rhine, have been kindly furnished me, verbatim, by the harbor-master of the said canal and its dependencies, at the request of the board of directors of the Amsterdam Canal Company, to whom I had applied for information:

In a former report I have given a general description of the new canal from the North Sea to Amsterdam, and pointed out the advantages it possesses over the old canal. I also mentioned the works then projected, and the necessity of a better communication by water with the Rhine, and thus with the inland and central Germany.

The alluvial soil of Amsterdam, consisting for a great part of alternate layers of peat and loose clay, has impeded the progress of the said works even more than anticipated; but at this moment the most prominent difficulties, as regards the large quays in course of construction, are surmounted, and their completion may be expected in 1881.

The timber harbor has already proved insufficient, and an extensive enlargement, combined with an effective amelioration of the existing harbor, is now in course of construction. For this purpose an area of 48 hectares (about 118 acres) of the newly-drained land will be excavated or dredged to a proper depth for receiving large vessels. A new bank over the reclaimed land has already been made. A surface of about 60 hectares (148 acres) of water will also be closed in by an earthen bank, and those two pieces, together with the existing harbor, will form a spacious and well-sheltered dock for discharging and storing timber of all descriptions and dimensions.

The unfavorable condition of the ground has impeded also these works. The banks in the water have already been more than once above the water-level, but disappeared again quite unexpectedly. The underground of Amsterdam and its neighborhood has proved very treacherous in many places, and contractors for public works have often experienced the fatal results of its peculiar substance.

With regard to the much-desired improvements of the water communication with the Rhine, everything is still in *statu quo*. About two years ago the conservative ministry was forced to resign by the predominant liberal party of the House of Commons, and was succeeded by a liberal ministry. On this occasion the department of home affairs was split into two separate administrations, and an additional minister was intrusted with the leading of public works, commerce, and industry. In the course of this summer the new minister proposed the amelioration of some existing and the making of several new canals, all united in one bill. The canal to the Rhine

was by far the most important part of the whole plan. Owing to financial scruples on the part of some members, and local jealousy on the side of others, this bill was rejected by the House of Commons by a majority of one vote. Pending the debates on this subject, a great division was manifested among the members of the liberal party, and the ministry, partly consisting of statesmen whose attitude, when in the ranks of the opposition, had pointed them out as reformers, fearing not to find sufficient support with their own party, has resigned. At present the government is in the hands of men of very heterogeneous political conviction, and nothing is known as to their views respecting the requirements for the development of the national resources; but the rejection of the canal bill has been received with much indignation, and therefore it may be expected that the public spirit will give a beneficial impulse in the proper direction.

The general depression in the mercantile atmosphere has, of course, been very much felt in this commercial country.

The yearly report of the chamber of commerce at Amsterdam for the year 1878 begins with stating "that their task will this time be a very sad one, on account of their having to describe a series of disappointments in all sorts of commercial operations, of heavy blows experienced by the collapse of some important firms abroad, and of great losses in consequence of the depression of the market and the lowering of freights. That, nevertheless, it may be noted with great satisfaction that the Netherlands commercial world has shown again to be proof against difficult times, as but few solitary cases occurred where the burden became too heavy."

It is evident that these unfortunate times must have had a great influence on the traffic through the canal. Still, the statistics show an important increase, as will appear from the following data.

Here the harbor-master subjoins the following statement of the number and aggregate tonnage of vessels that passed through the North Sea Canal, both inwards and outwards, monthly, from the 1st of November, 1877, a year after it was opened for traffic, to the 31st of August, 1879:

*Statement of monthly traffic.*

Months.	Inward.		Outward.		Total.	
	Number of vessels.	Tonnage.	Number of vessels.	Tonnage.	Number of vessels.	Tonnage.
November, 1877	105	47,140	92	42,284	197	89,424
December, 1877	92	39,177	105	41,388	197	80,565
January, 1878	74	29,331	81	30,937	155	60,268
February, 1878	70	30,121	59	26,134	129	56,255
March, 1878	91	39,750	102	39,160	193	78,910
April, 1878	113	51,472	156	67,988	269	119,460
May, 1878	100	51,395	144	61,101	244	112,496
June, 1878	110	48,334	122	54,149	232	102,483
July, 1878	176	66,784	130	60,103	306	126,887
August, 1878	117	51,110	111	43,269	228	94,379
September, 1878	113	50,304	99	41,813	212	92,117
October, 1878	116	51,303	96	43,435	212	94,738
November, 1878	105	46,325	102	44,455	207	90,780
December, 1878	105	45,961	92	44,506	197	90,467
January, 1879	54	23,153	60	28,312	114	51,465
February, 1879	71	30,742	58	22,756	129	53,498
March, 1879	85	35,345	109	46,298	194	81,643
April, 1879	119	51,580	133	60,942	252	122,522
May, 1879	127	60,611	139	60,082	266	120,693
June, 1879	155	73,867	126	54,899	281	128,766
July, 1879	177	71,050	159	75,392	336	146,442
August, 1879	167	73,515	145	67,837	312	141,352
Total	2,442	1,078,370	2,420	1,066,240	4,862	2,144,610

The fishermen are not included in these figures. About a dozen vessels ran in for shelter during gales, but did not pass through the canal, and are not among the above number.

With regard to nationality, the said number of vessels was divided as follows:

	Vessels.		Vessels.
British .....	1,770	American .....	41
Dutch .....	1,706	Spanish .....	28
Norwegian .....	732	Austrian .....	20
German .....	282	French .....	13
Swedish .....	99	Greek .....	6
Russia .....	66	Belgian .....	1
Danish .....	52		
Italian .....	46	Total .....	4,862

Of the above vessels there were 720 drawing 5 meters or upwards of water, namely:

104 vessels of 5.0 meters, or 16 feet 4 inches draught.  
 61 vessels of 5.1 meters, or 16 feet 8 inches draught.  
 73 vessels of 5.2 meters, or 17 feet 0 inches draught.  
 76 vessels of 5.3 meters, or 17 feet 4 inches draught.  
 66 vessels of 5.4 meters, or 17 feet 8 inches draught.  
 64 vessels of 5.5 meters, or 18 feet 0 inches draught.  
 62 vessels of 5.6 meters, or 18 feet 4 inches draught.  
 38 vessels of 5.7 meters, or 18 feet 8 inches draught.  
 18 vessels of 5.8 meters, or 19 feet 0 inches draught.  
 30 vessels of 5.9 meters, or 19 feet 4 inches draught.  
 34 vessels of 6.0 meters, or 19 feet 8 inches draught.  
 31 vessels of 6.1 meters, or 20 feet 0 inches draught.  
 19 vessels of 6.2 meters, or 20 feet 4 inches draught.  
 14 vessels of 6.3 meters, or 20 feet 8 inches draught.  
 9 vessels of 6.4 meters, or 21 feet 0 inches draught.  
 6 vessels of 6.5 meters, or 21 feet 4 inches draught.  
 3 vessels of 6.6 meters, or 21 feet 8 inches draught.  
 5 vessels of 6.7 meters, or 22 feet 0 inches draught.  
 2 vessels of 6.8 meters, or 22 feet 4 inches draught.  
 2 vessels of 6.9 meters, or 22 feet 8 inches draught.  
 3 vessels of 7.1 meters, or 23 feet 4 inches draught.

The maximum draught for going through the canal is 21 feet 4 inches, but vessels drawing 22 feet can pass safely with the necessary precautions and by special permission. The average depth in the tidal harbor is 21 feet 8 inches at low and 27 feet at high water, at the shallowest point.

Since the opening of the canal, which will be three years on the 1st of November next, only one vessel has been lost near Ymuiden (the name of the village sprung up since the opening). The said vessel had no pilot, and the captain seemed not to be acquainted with the current. She was driven too low down by the current, and, when the captain saw that he could no more reach the harbor or mouth, the wind being north-northwest, instead of tacking, when he would have been quite safe, ordered to let go the anchor; but, before it could hold, the stern struck the bottom and the whole ship disappeared in less than an hour's time. This is the only loss and the only serious accident connected with the harbor of Ymuiden.

Since the 26th April of this year the trans-Atlantic steamers running between Amsterdam and Java, via the Suez Canal, and that formerly sailed from Nieuwe Diep, make use of the new canal, and sail regularly every fortnight. The offices and godsheds of the company have been removed from Nieuwe Diep and put up at Amsterdam.

Several vessels of good 22-foot draught have already proceeded to town without breaking bulk. This shows that vessels of considerable size need no more be afraid of disputes about lighterage, such as often occurred formerly, and caused the insertion of the clause "Amsterdam excepted," in charter parties.

It must be remarked that the data given by Mr. Urquhart in his work called "Dues and charges on shipping in foreign ports," as regards Amsterdam and Dutch ports in general, are altogether obsolete, much more favorable tariffs and stipulations having been introduced since 1875.

#### PUBLIC IMPROVEMENTS.

Among the improvements rendered necessary by the opening and gradual completion of the North Sea Canal, figures, in the first place, a spacious quay on the northeastern boundary of the city. This quay, nearly  $1\frac{1}{2}$  miles in length, has been since some time in course of con-

struction, and is intended for the accommodation of vessels of large draught, which will be able to moor alongside thereof and to discharge their cargoes on shore, in order to be at once stored in the large warehouses on the other side of the roadway, or conveyed elsewhere by rail or small craft.

When it is considered that the whole of this quay is being constructed in a place where there was formerly nothing but water to be seen, and that the soil under the surface thereof was, for the greater part, of the most treacherous nature—peat and soft mud—some idea may be formed of the magnitude and cost of this work, raised entirely at the expense of the local government, and consequently from the contributions of the already heavily-taxed inhabitants of Amsterdam.

The two large jetties, each about 400 feet long and 200 feet wide, built in 1877 on the northwestern extremity of the city to meet the immediate requirements of shipping consequent on the opening of the new canal were, in 1878, connected with the several lines of railroad by a railway-bridge across the locks forming the entrance to the west dock.

In the spring of this year the Amsterdam Dry-dock Company completed and opened an iron dry-dock of large dimensions for the use of the Java steamers and other vessels of large size that are now enabled to visit this port.

The important and, in an engineering point of view, extraordinary and highly interesting railway works connected with the plan of constructing a central station for the use of the several lines that have their termini at Amsterdam are progressing, but meet with much difficulty on account of the unfavorable state of the soil. The said station is intended to be built on the central one of three islands that have been raised on the northern extremity of this city, in the immediate vicinity of the docks; but the ground on which it is to be constructed has not yet sufficiently settled down to allow a commencement to be made with the erection of the same, so that a temporary wooden structure has been built on the most western of the said islands.

The rapidly increasing population of Amsterdam having rendered it indispensably necessary to enlarge the city, a number of new streets and roads have, in the course of the last few years, been opened all round the town, and large tracts of meadow land are now covered with houses of various sizes and degrees of elegance. As these are, for the greater part, tenanted even before they are quite completed it is likely that the building mania will continue for a considerable time.

In this new part of the town a national museum for works of art has since the last two years been in course of construction. This magnificent palatial edifice, when completed, will form the receptacle for the numerous and valuable pictures and other works of art hitherto preserved in various ineligible and incommodious buildings all over the country.

The zoological gardens are continually increasing in extent and interest. The society "*Natura Artis Magistra*," by whom they are maintained, deserves great praise for the efficient manner in which the grounds are annually improved. At the present moment the foundation is being laid for an aquarium of large dimensions, so that the society will soon be enabled also in this respect to compete with similar institutions in other capitals of Europe.

Great activity is displayed in every part of the old and new town, both by the municipal government and by private companies and individuals, in the building of new and the leveling of old bridges, in widening streets, in constructing tramways, &c. In fact, any one who has not visited Amsterdam for the last few years would now be quite astonished and

puzzled at the numerous alterations and improvements that have been effected and carried out in a comparatively short period of time, and which clearly show that this remarkable city is greatly increasing in prosperity, and has evidently awakened from the dull state of lethargy that prevailed during a number of years and kept it at a disadvantage with other European capitals.

D. ECKSTEIN.

UNITED STATES CONSULATE,  
Amsterdam, October 1, 1879.

*Statement showing the trade, imports and exports, of the Netherlands with foreign countries during the year ending December 31, 1878.*

Countries whence imported and whither exported.	General imports.	Imports for consumption.	General exports.	Transit with trans-shipment.	Transit without trans-shipment.
	Kilograms.	Guilders.	Kilograms.	Kilograms.	Kilograms.
Africa, east coast .....	828,804	292,173	463,589	204,416	93,000
Africa, west coast .....	10,725,919	3,554,047	4,568,865	635,119	
Algiers .....	20,954,179	179,723	42		
Antigua .....	843,875	94,356	2,513,634	64	
Azores and islands on the west coast of Africa .....			23,960	3,184	
Barbary States .....	1,170,000	7,020			
Belgium .....	1,642,712,045	116,513,545	1,331,142,801	21,314,895	638,987,323
Brazil .....	3,763,808	1,547,680	693,936	5,674	
Bremen .....	7,170,715	1,853,252	3,037,388	1,070,692	
Central America .....	2,558,979	62,148			
Chili .....			982		
China .....	322,666	35,510	1,551,371	622,661	760,616
Columbia, Ecuador, and Venezuela .....					
Cuba .....	808,313	135,656	450	450	
Curaçao .....	2,860,212	709,575	35,485	34,767	
Denmark .....	1,746,234	250,411	1,001,759	14,845	
Danish Principalities .....	5,167,568	332,920	12,973,162	3,068,594	
Egypt .....	31,730,832	3,165,755	135,255	55,381	
British American Possessions .....	167,105		150,771	78,790	
British India .....	85,316,499	22,994,311	804,978	24,663	
France .....	38,186,781	15,828,155	1,014,003	170,269	1,839,019
Gibraltar .....	1,181	40	23,041,026	828,263	
Greece .....	742,929	195,771	697,680	74,071	
Great Britain .....	1,094,690,886	216,541,401	803,237	133,528	16,220,438
Guiana, Dutch .....	4,145,001	852,852	471,692,982	61,252,840	
Guiana, British .....	219,718	44,907	4,493,878	279,597	
Guiana, French .....			172,966	73,329	
Harti .....	3,028,437	303,055	156,048	190	
Hamburg .....	40,232,616	8,364,802	241		290,695
Ionian Islands .....	5,893,311	1,173,861	36,057,714	7,083,353	
Italy .....	25,297,197	2,902,719	195	195	
Japan .....	15,037,358	4,245,503	22,163,320	921,361	24,000
Java and East Indian Possessions .....	161,847,775	68,903,763	581,361	80,312	
Cape of Good Hope .....		1,268	78,714,149	15,942,704	
Malta .....	358,830	107,649	273		
Mecklenburg .....	885,433	77,015	83,286	5,266	
Mexico .....	2,416,380	217,537			
Neway .....	89,229,543	4,961,077	2,529		
Olenburg .....			11,106,523	1,774,556	
Austria .....	567,409	68,719	522,750		
Peru and Bolivia .....	51,022,635	10,204,427	16,683	150	
Philippine Islands .....	98,736	101,487			
Portugal .....	16,036,060	975,427	4,618,761	540,661	
Prussia .....	3,575,585,298	193,065,252	1,551,103,396	97,334,061	321,761,684
Rio de la Plata, Buenos Ayres .....	3,329,504	1,467,807	1,401,567	119,210	
Russia .....	749,212,454	62,900,522	46,899,871	6,099,012	729,431
Spain .....	169,303,363	6,763,251	9,411,208	40,737	
Turkey .....	19,047,581	1,409,450	4,834,546	1,284,177	824,775
United States .....	312,299,942	51,995,116	25,295,377	6,409,875	
Sweden .....	155,610,858	4,286,249	20,886,834	13,298,798	190,000
Stocked and stranded goods .....	239,900	26,893			
Total .....	3,362,414,989	809,774,063	3,674,890,932	240,880,710	1,001,630,981

*Statement showing the number of vessels which entered at and cleared from the ports of the Netherlands, from and for ports in the United States, during the year ending December 31, 1878.*

## ENTERED.

Flag.	Number of vessels.	With cargo.	In ballast.
Dutch .....	42	42	.....
Danish .....	2	2	.....
British .....	89	89	.....
French .....	2	2	.....
Italian .....	16	16	.....
United States .....	21	21	.....
German .....	47	47	.....
Norwegian .....	136	136	.....
Austrian .....	14	14	.....
Russian .....	11	11	.....
Spanish .....	2	2	.....
Swedish .....	6	6	.....
Total .....	388	388	.....

The above statement includes steamers entered, as follows: Dutch, 30; Danish, 1; British, 8; German, 2; and Norwegian, 1.

## CLEARED.

Flag.	Number of vessels.	With cargo.	In ballast.
Dutch .....	52	32	30
Danish .....	1	1	.....
British .....	85	11	74
Italian .....	19	5	14
United States .....	31	7	24
German .....	43	20	23
Norwegian .....	70	18	52
Austrian .....	12	1	11
Russian .....	5	1	4
Swedish .....	5	1	4
Total .....	323	97	226

The above statement includes steamers cleared, as follows: Dutch, 30; Danish, 1; British 3, and Norwegian 1.

## ROTTERDAM.

*Report, by Consul Winter, on the trade and commerce of Rotterdam for the year ending September 30, 1879.*

Pursuant to consular instructions, I have the honor to submit my annual report for the year ending September 30, 1879, respecting the commerce and navigation of the consular district of Rotterdam, together with accompanying tabulated statements thereof.

## THE GRAIN TRADE.

Within the last two years Rotterdam has become an important grain market for American cereals. And for some time to come, at least, there will undoubtedly exist a brilliant market in the Netherlands for American grain and produce, owing partially to the general failure of crops in

Europe, and especially on account of a partial failure of the harvest of 1879 in the grain-growing districts of Russia and the cereal regions adjacent to the Black and Baltic Seas. From October 1, 1878, to October 1, 1879, the amount of grain imported direct from the United States to Rotterdam was 5,386,336 bushels, against 4,359,500 bushels in the preceding twelve months, and 864,500 bushels in the year 1876-'77. During the twelve months ending October 1, 1879, there was the largest grain shipment to this port from the United States that has been recorded in any one year in the commercial history of Rotterdam.

*Wheat.*—The import of wheat was 2,941,412 bushels, against 2,400,000 bushels in 1877-'78, and against 284,500 bushels in the year 1876-'77.

*Rye.*—The import of rye during the same period was 1,843,920 bushels, against 1,636,000 bushels in the year 1877-'78, and against 418,500 bushels in the preceding twelve months.

*Maize.*—There has been a very large increase in the shipment of Indian corn to this port from the United States during the past twelve months. For the year ending October 1, 1879, the amount imported was 601,000 bushels, against 323,000 bushels in the preceding twelve months, and against 161,500 bushels in the year ending October 1, 1877.

## COTTON.

Rotterdam will probably always remain a favored port for the transit trade in cotton, but whether it will develop into an important cotton market depends upon the energy and enterprise of the merchants who may continue to engage in this branch of commerce. The natural advantages of Rotterdam as a seaport and cotton emporium for Germany, Switzerland, and Alsace ought to guarantee for it a flourishing and constantly increasing trade.

The following tabulated statement shows the stock in store and import of cotton for the year ending October 1, 1879, as compared with the preceding twelve months:

Kinds.	From England.	From Continent.	Direct.	Total.	Stock in store October 1, 1879.
	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>	<i>Bales.</i>
American .....	13, 110	14, 587	8, 946	36, 643	1, 705
Divers .....	488	550	550	1, 048	.....
East Indian .....	42, 706	6, 573	2, 900	52, 779	228
Total .....	56, 374	21, 160	12, 396	89, 870	1, 933
Total for preceding year .....	52, 122	22, 149	13, 456	87, 727	7, 168
Increase .....	4, 192	.....	.....	2, 143	.....
Decrease .....	.....	989	1, 060	.....	5, 235

## PETROLEUM.

For years past there has been a steady demand for this branch of commerce in the Holland market, though during the present year this commodity has been subject to a great decline in value.

Imports of petroleum from October 1, 1878, to October 1, 1879, amounted to, in round numbers, 200,000 barrels, against 212,426 barrels in 1877-'78, and 796,812 barrels in 1876-'77.



The annual consumption of petroleum in the Netherlands is gradually increasing, according to authentic statistics, as shown by the following statement:

	Barrels.
Petroleum consumed in 1875 .....	258,000
1876 .....	262,000
1877 .....	270,000
1878 .....	285,000

A considerable portion of this amount was imported via Antwerp and Bremen, while a portion of the shipments to Rotterdam was reshipped to Germany.

The exact statistics of the amount of raw and refined petroleum shipped to this port during the twelve months ending October 1, 1879, are not given.

#### TOBACCO.

Owing to the large shipments of tobacco to this port from Java and Sumatra during the present year, and to the great favor with which Manila tobacco is received in the Dutch markets, the imports from the United States have not materially increased for the past twelve months over those of the preceding year.

The shipments of various kinds of tobacco from the United States for the year ending October 1, 1879, to Rotterdam, including the stock in store and the shipments of the preceding twelve months, were as follows:

Kinds.	In store October 1, 1878.	Imports.	
		October 1, 1877, to October 1, 1878.	October 1, 1878, to October 1, 1879.
Maryland and Ohio.....hogsheads..	598	4,541	5,996
Virginia.....do.....	860	1,879	710
Kentucky.....do.....	159	697	322
Seed-leaf and cuttings.....do.....		150	465
Total .....	1,417	6,767	7,593

#### BEEF, PORK, AND LARD.

During the course of this year there was not only an increased demand for these articles from the United States, but also a very considerable increase in the value of the shipments to this port.

#### EXPORTS TO THE UNITED STATES.

The total value in gold of the declared exports to the United States from the port of Rotterdam during the year ending September 30, 1879, was \$837,962.09.

During the year ending September 30, 1878, the total value of exports amounted to \$533,506.49, thus showing an increase for this year of \$304,455.60.

One of the principal exports from Rotterdam to the United States is Java coffee, of which product \$176,530.91 is the valuation for the year ending September 30, 1879, against \$25,174.62 in 1877-'78, thus showing a very remarkable and desirable increase during the past twelve months.

in this, to Americans, wholesome and necessary luxury. Madder is the second in importance, of which, during the same period, \$92,080.11 was the valuation of the export, against \$27,136.38 in 1877-'78. The third export in importance is that of cheese, valued at \$64,249.85, against \$63,940.88 in the year 1877-'78. The export of gin during the same period amounted to \$48,260.88, against \$45,409.22 in 1877-'78.

The export of iron was valued at \$37,980.70, against \$42,959.27 in the preceding twelve months. The value of herrings exported was \$13,518.30, against \$21,547.76 in 1877-'78.

Empty petroleum barrels, of American manufacture, that were reshipped from this port to the United States were valued at \$188,737.24, thus exceeding any other export in valuation.

#### NAVIGATION.

The following condensed report of the chamber of commerce of this city shows the state of the shipping movement of this port for the past three years :

Vessels entered.	1876.		1877.		1878.	
	No.	Tons.	No.	Tons.	No.	Tons.
Steamers.....	2,828	1,645,055	2,587	1,558,539	2,712	1,686,549
Sailing vessels.....	847	317,055	734	312,259	793	372,233
Total.....	3,675	1,962,110	3,321	1,870,798	3,505	2,058,782

*American tonnage.*—From October 1, 1878, to October 1, 1879, 11 American vessels, with a tonnage of 10,304, entered this port, against 26 vessels, with a tonnage of 21,576, in the year 1877-'78, and 12 vessels, with a tonnage of 7,851, in the year 1876-'77.

#### EMIGRATION.

The following statistics in regard to emigration, taken from a report of the chamber of commerce of Rotterdam, will be of interest, as it shows the number of emigrants that have left this port direct for the United States during the past two years.

During the year 1877, 2,222 emigrants took passage at Rotterdam for the United States. Of this number, 574 were Hollanders.

During the year 1878, 2,669 emigrants embarked at this port in search of new homes in the United States. Of this number, 563 were Hollanders; thus showing an increase of 447 emigrants in 1878 over the preceding year that left this port for the United States.

#### IMPORTS FROM THE UNITED STATES.

Each year, in addition to the staples of grain, cotton, petroleum, and tobacco, which show a steady increased demand in the Netherlands markets, new articles of manufacture and new products, heretofore untried by the Hollander, are added to the list of imports received from the United States. Not only does beef, pork, lard, and all varieties of canned goods find ready sale here, but also many other articles, both of manufacture and of natural products, are being added each year to the list of exports from the United States, such as clocks, watches, sewing-machines,

scales, coffee-mills, toys, baby-carriages, skates, and a great variety of agricultural implements. And, as a closing index of American energy and industry, I am pleased to note that American cheese is being imported at Rotterdam, and is beginning to be received with favor in this land of "butter and cheese."

JNO. F. WINTER.

UNITED STATES CONSULATE,  
Rotterdam, November 29, 1879.

*Statement showing the value of declared exports from Rotterdam to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Bulbs .....				\$5,049 60	\$5,049 60
Coffee .....	\$5,489 57	\$104,350 12	\$47,251 50	10,439 72	176,530 91
Cheese .....	21,056 12	16,246 07	7,802 61	19,145 05	64,249 85
Cauliflowers .....			540 00	3,212 60	3,752 60
Cattle .....	12,192 00	2,240 00	1,200 00	4,306 00	19,938 00
Capsules and cubebs .....	9,027 12	2,173 68	307 00	4,526 63	16,034 43
Flax .....	6,024 71	9,563 92	21,119 48		37,308 11
Gin .....	15,465 58	10,962 20	12,932 18	8,900 92	48,260 88
Glycerine .....	1,107 57	2,418 23	537 40		4,053 20
Herrings .....	6,822 10	2,204 80		4,491 40	13,518 30
Hides .....			2,922 70	5,577 54	8,500 24
Iron .....	15,169 69	584 40	14,124 47	8,102 14	37,880 70
Madder .....	24,777 89	14,228 56	27,178 74	25,895 52	92,080 71
Mineral water .....	360 00			1,271 40	1,631 40
Pipes and clay .....	2,318 90	2,015 18	2,897 24	2,791 39	10,023 71
Petroleum, barrels .....	37,560 80	44,719 57	53,403 16	53,053 71	188,737 24
Plants .....	1,562 36	825 32	290 06		2,677 74
Quinine, sulphate .....	11,751 48			15,504 68	27,256 16
Seeds .....	2,275 08	1,375 40	938 44	209 00	4,797 92
Tin .....	2,795 35	6,707 96	3,035 52	2,133 96	14,662 79
Miscellaneous .....	15,921 22	2,900 92	33,300 43	8,784 13	60,906 70
Total in United States gold .....	192,284 54	223,511 33	229,780 93	192,385 29	837,962 09
Total for preceding year .....	136,308 07	82,667 33	132,815 85	181,715 24	533,506 49
Increase .....	55,976 47	140,844 00	96,965 08	10,670 05	304,455 60

*Statement showing the nationality and tonnage of vessels entered\* at the port of Rotterdam during the last two years.*

Flag.	1877.		1878.	
	No.	Tons.	No.	Tons.
United States .....	13	9,700	23	24,506
Austrian .....	1	664	11	9,771
Belgian .....			1	964
Danish .....	45	25,910	52	23,294
Dutch .....	628	331,240	639	346,400
British .....	2,174	1,227,949	2,267	1,347,022
French .....	35	7,812	17	7,056
German .....	246	104,673	255	142,499
Greek .....	4	1,943	3	1,327
Italian .....	16	11,140	28	19,838
Japanese .....			1	637
Norwegian .....	99	53,400	128	77,423
Portuguese .....	1	206		
Russian .....	6	2,592	17	11,258
Spanish .....	5	3,640	15	9,987
Swedish .....	48	29,865	48	26,771
Total .....	3,321	1,870,798	3,505	2,058,790
Increase .....			184	187,964

\* Official statistics of clearances not given.

*Statement showing the navigation, by countries, of the number and tonnage of vessels entered\* at the port of Rotterdam during the last two years.*

Whence.	1877.		1878.	
	No.	Tons.	No.	Tons.
Austria .....	4	1,409	4	659
Belgium .....	5	2,577	2	1,346
Denmark .....	2	765	3	397
France .....	163	43,728	144	42,585
Greece .....	7	1,881	6	1,750
Great Britain and Ireland .....	2,066	1,061,723	2,066	1,092,475
Hanse ports .....	61	27,846	91	30,243
Italy .....	12	5,369	13	7,230
Netherlands .....	6	6,144	12	12,043
Portugal .....	12	3,552	2	348
Prussia .....	103	62,529	132	75,505
Russia .....	240	179,646	317	233,655
Spain .....	101	86,420	145	111,657
Sweden and Norway .....	94	32,182	85	27,803
Turkey .....	11	8,498	10	9,235
British East Indies .....	9	7,900	10	9,115
Dutch East Indies .....	68	83,985	56	67,946
Spanish Colonies, Asiatic .....	1	1,223		
Turkish Colonies, Asiatic .....	8	1,515	6	2,244
British Colonies, African .....	11	3,000	10	2,940
Liberia .....	3	802	2	555
French Colonies .....	48	43,415	23	22,124
Portuguese Colonies .....	3	1,033	4	1,143
West coast of African .....	17	7,721	17	6,362
Argentine Republic .....	6	1,685	4	1,405
Brazil .....	2	516	9	2,474
British Colonies .....	4	1,768	2	1,057
Haiti and San Domingo .....	8	2,966	7	3,346
Mexico .....	6	1,884	8	2,036
Dutch West Indies .....	4	974	4	1,217
Peru .....	25	25,490	40	43,502
United States .....	168	146,645	260	240,845
Venezuela, &c .....	5	1,514	4	1,295
Other countries .....	18	11,852	7	2,185
<b>Total</b> .....	<b>8,321</b>	<b>1,870,798</b>	<b>3,505</b>	<b>2,058,782</b>

\* Official statistics of clearances not given.

### SCHIEDAM AND VLAARDINGEN.

*Statement showing the value of declared exports to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Anchovy .....	\$941 00	\$1,702 00	\$510 00		\$3,152 00
Arrack .....				\$186 50	186 50
Candle-pitch .....	504 76	509 59	1,114 85	261 44	2,390 64
Corkwood .....	1,126 26	459 46		2,159 75	3,745 48
Gin .....	25,302 07	23,141 78	17,551 27	16,704 76	82,699 88
Herring .....	63,910 70	5,279 00	2,829 10	83,515 06	155,533 86
Pickled fish .....	240 00				240 00
Stock-fish .....	400 00	640 00	300 00		1,340 00
<b>Total</b> .....	<b>92,424 80</b>	<b>31,731 83</b>	<b>22,305 22</b>	<b>102,827 51</b>	<b>249,289 36</b>

W. H. C. JANSSEN.

**BELGIUM.**

*Report, by Consul Wilson, of Brussels, on the commerce, industries, and trade of Belgium with the United States, for the year 1878 and first six months of the year 1879.*

Since my last annual report upon the trade and commerce of this country, the condition of these interests has not materially changed for the better.

The great manufacturing industries of the kingdom, upon which so much of its wealth depends, continue to struggle against a dull market and unprofitable prices, which results in an enforced economy by all classes, and a consequent general decline of trade both foreign and domestic.

In the agricultural department, notwithstanding heavy and protracted rains during the latter part of June and a large portion of July, which then threatened great damage, the subsequent warm dry weather has enabled the farmers to report more than an average of cereal and other crops well harvested and secured. But owing to the high prices of agricultural land and the constantly increasing cost of fertilizing and cultivating it, however good the crop may be, this branch of industry is no longer either profitable or adequate to the wants of the country; consequently, for the supply of cheap food produce, Belgium is now more dependent upon foreign production than at any previous period during her history, and of this supply the United States continues to furnish a yearly increasing amount.

Although no official commercial report for 1878 has yet been published by the government, through the courtesy of the minister of finance, who has the supervision of these statistics, I am enabled to give the following brief exhibit of the general commerce of the country for that year, with a more detailed statement of the trade with the United States since 1877.

In 1878 Belgium imported from all foreign countries a declared value of merchandise amounting to \$462,659,566, of which sum \$284,243,442 represented the value of imports for consumption, and the balance, \$178,416,124, merchandise in transit. The total value of her exports for 1878 amounted to \$390,463,592, of which sum \$214,683,859 represented home products, and the balance, \$175,779,733, foreign.

**IMPORTS FROM THE UNITED STATES.**

The value of all kinds of merchandise imported from the United States in 1877 was \$23,597,778, while in 1878 it amounted to \$33,942,428, an increase of \$10,329,620 over the previous year.

Of the \$23,597,778, the total value for 1877, wheat, rye, oats, corn, flour, lard, hams, bacon, petroleum, cotton, and tobacco contributed \$22,894,005 in the following proportions:

Wheat .....	\$4, 501, 915
Rye .....	1, 145, 409
Oats and corn .....	446, 038
Flour .....	153, 158
Lard .....	3, 322, 682
Hams and bacon .....	3, 970, 584
Petroleum .....	7, 342, 519
Cotton .....	703, 599
Tobacco .....	1, 305, 101
Total .....	22, 894, 005

In 1878 these same articles contributed \$31,575,913 to the total value of our exports to this country in the following proportions:

Wheat.....	\$10,537,689
Rye .....	751,434
Indian corn .....	1,312,852
Flour .....	376,484
Lard .....	2,594,466
Hams and bacon .....	7,237,583
Petroleum .....	5,571,290
Cotton .....	1,699,175
Tobacco .....	1,494,940
Total .....	31,575,913

Large as was the increased aggregate value of these particular imports in 1878 over that of 1877, the following statement for the first six months of the present year will show that Belgium still continues to buy from us an increasing quantity of these staple products of our soil. Of wheat, rye, corn, flour, petroleum, hams, bacon, tobacco, and cotton, there arrived at Antwerp from the United States during these first six months a declared aggregate value amounting to \$19,511,069, proportionally indicated as follows:

Hams and bacon .....	\$6,731,696
Wheat .....	6,342,283
Petroleum .....	2,530,060
Corn .....	1,034,771
Rye .....	987,226
Tobacco .....	953,309
Cotton .....	658,047
Flour .....	273,677
Total .....	19,511,069

It will thus be seen that in 1877, out of a total of \$23,597,778 (the declared value of all imports from the United States for that year), \$22,894,005 were realized from the products of our soil, and \$13,539,786 of that sum from food produce alone. In 1878, out of a total declared value amounting to \$33,942,428, the produce of our soil contributed \$31,575,913, and of this sum \$22,908,508 was for food produce.

Although the relative importance of these particular exports to Belgium during the first six months of the present year cannot now be ascertained, the statement already given will show that their positive value has been greatly increased since 1878, and that if continued in the same proportion throughout the year, it will amount to the unprecedented sum of \$39,022,138.

In consequence of the very imperfect and unreliable custom-house registration of many of the smaller articles of merchandise admitted into this country on the free list, I have omitted to give in the foregoing statement the amount of what may be called, for want of a better name, special food produce imported from the United States during the last two years. This class of merchandise comprises canned meats, vegetables, fruits, salmon, oysters, and other shell-fish, and already constitutes a large and rapidly-increasing element of our export trade. Canned meats are daily growing in favor with the laboring classes of this country, and are rapidly taking the place of the inferior cuts of butchers' meat, which so many of this class are forced from motives of economy to purchase.

As the population of Belgium is so largely made up of workmen and artisans, an almost unlimited demand for this economical food may be

safely calculated upon in the future, if continued to be properly prepared and safely packed for the market.

In a previous report to the Department I mentioned the importance of our trade with this country in canned and otherwise prepared fruits and vegetables, and daily observation convinces me that this branch of trade could be developed almost indefinitely. The climate of Belgium is not favorable to the growth of a large variety of either fruits or vegetables, and, as under the most favorable circumstances a large portion of the population is forced by economy to live in a great degree on a vegetable diet, if we can furnish them with a better quality and greater variety of this food, even at the same price they pay for their home products, we will beyond doubt realize a constantly-increasing market for these supplies. The workmen in the mines, and in the large manufacturing of iron, lead, zinc, copper, and glass, and, indeed, almost all classes of laborers in this country, consume for their daily food large quantities of dried fruits and vegetables, and among these there is a form of the dried apple which is rapidly coming into use, not only among workingmen, but with the better classes of society also. The process of its manufacture consists in first subjecting the apple to the action of hot steam, and then extracting the pulp from the skin and seeds. This pulp is then mechanically spread upon drying trays, placed in a heated apartment arranged for the purpose, and there left until all the water is driven off and the pulp completely desiccated. It is then cut into small squares and packed for the market.

Of all the forms of nutritive diet into which the apple enters this is doubtless the most practical, and destined to become the most popular with all classes, for it needs but to be resolved again into a pulp by the addition of a little water in order to fit it for all the dietic combinations for which either the fresh or dried fruit is adapted. Although this article is now chiefly prepared at Abbeville, in France, it is found for sale in the shops of every city in Europe. Its preparation will therefore, without doubt, soon have a much wider range, and the market for it will then be controlled by the quality of the article produced. Seeing that no country in the world produces this fruit in such perfection as the United States, it has occurred to me that, if this mode of its preparation was adopted, the superior quality of the American apple generally would soon enable our exporters to control its sale in Europe, and thus make it another important source of revenue from our export trade.

One of the most striking features of the import of our food produce into this country within the last two or three years is the rapid increase in the purchase of our Indian corn. Although in the Belgian ports of entry oats and corn are included in the same registration, the quantity of oats received is quite insignificant; consequently, for all practical purposes, the figures given in the registration may be regarded as indicating Indian corn alone. In 1877 the declared value of this grain received at Antwerp from the United States was \$446,038; in 1878 it was \$1,312,852, and during the first six months of the present year amounted to \$1,034,770, or almost two and a quarter times the export for the entire year of 1877, and but a small fraction less than that of 1878.

There can be but little doubt that the increased consumption of this grain in Belgium is the result of the successful efforts made to convince these people of its heretofore ignored merits as a cheap and nutritious article of food for both man and beast, and there is every reason to believe that it will yet be more extensively used for this purpose.

The importation of American horses into this country is another branch of trade that is beginning to assume important proportions. In

1878 but one horse was registered as having been brought from the United States to this country, whereas for the first six months of the present year no less than 300 have been imported, and I am informed that the demand is constantly increasing.

The purchase of our manufactures by foreign countries is slowly but surely increasing, and doubtless will eventually acquire important proportions, but the figures already given in this report indicate most clearly upon what we must chiefly depend for the revenue we would derive from our trade with this country. With facilities for manufacture which but few continental countries enjoy, Belgium will yet continue to be a formidable competitor of the United States for the cheap product of mechanical skill and labor, but the qualities that fit her for this purpose will continue to increase her dependence upon us for the material with which to feed her laboring classes. Improved machinery and increased industry and economy in manufacture may enable this and other European countries to struggle hard with us for supremacy in the cheap production of manufactures, but no amount of human intelligence or industry will enable them to wrest from us the advantage we possess for the cheap supply of the products of the soil, and to the greater development of a foreign market for these we cannot attach too much importance.

As a nation we waste and destroy more than would feed a large portion of the laboring classes of Europe, and if we were but to suitably prepare for foreign consumption that portion alone of the product of our fields and orchards which in our extravagance we permit to go to waste, we would confer a boon on the laboring classes of countries less favored, and at the same time give to our agriculturists an increased remuneration for their investments of capital and labor. The aggregate value of green pease, beans, and other garden and orchard produce exported by France to all the civilized countries of the world is enormous, and there is no good reason why we, with a soil and climate equally favorable to the growth of these articles, should not, if we give their culture and preparation for export the same careful attention, share with that country a large proportion of this trade.

#### INDUSTRIES.

*Coal.*—As the coal and metal industries of this country dominate all others, and constitute the basis of the material wealth of the nation, a brief review of these will be sufficient to indicate the condition of its manufacturing industries generally.

In 1877 there were 295 coal mines in active operation, giving employment to 101,343 workmen, on an average pay of 3 francs per day, whose output from the mines amounted to 13,938,523 tons. In 1878 there were 300 mines worked, employing 99,032 workmen, on an average pay of 2.90 francs, who brought to the surface 14,899,175 tons, an augmentation of product of almost a million tons, with a reduction of 2,311 workmen, whose mean daily earnings were 10 per cent. less than that paid in 1877, yet notwithstanding this increase of output, and the smaller mean daily salary paid the workmen, 1878 was a more disastrous year to the coal mining interests of the kingdom than 1877. This resulted chiefly from the difference in the price received for coal at the pits during these two years. In 1877 the mean price received was 9.11 francs per ton, while the mean for 1878 was but 7.56 francs, making a difference of 1.55 francs per ton, or upon the grand total 23,193,721 francs.

In the province of Namur, where most of the coal mines of the king-



dom are situated, in 1878 the proprietors of fifteen mines sustained a loss of 483,447 francs, three only realized a profit of 12,250 francs, whilst the estimated aggregate loss of all the companies in the province, counting profit and loss, amounted to 471,195 francs.

*Blast furnaces.*—If the coal interests of the kingdom were unremunerative in 1878, that of iron, steel, and other metals was little less encouraging. In 1877 the blast furnaces in operation employed 3,056 workmen, and produced 363,973 tons of metal. In 1878 they employed but 2,860 workmen, and produced 464,482 tons.

Of the total product of these furnaces in 1877, 40,262 tons was metal designed for foundry purposes, and 323,711 for the forge. Of the total for 1878, 29,955 tons was foundry metal, and 434,527 tons forge. The mean price of foundry metal in 1877 was 80 francs per ton, and in 1878 71.50 francs. The mean price of puddling or forge metal in 1877 was 59 francs, while in 1878 it fell to 52.10 francs per ton. It will thus be seen that the increase of production in 1878 over that of 1877 was 100,509 tons, and the value of this product 2,460,729 francs.

*Steel.*—The quantity of steel manufactured in 1878 was about the same as that of the previous year, being 54,164 tons, but the price realized was 13.62 francs less per ton than in 1877; the mean of which for that year was 95 francs, while in 1878 it was but 81.50.

The aggregate value of this metal produced in 1878 was therefore 4,387,284 francs as against 5,145,580 in 1877, being a net reduction in the value of the yield of 1878 amounting to 758,296 francs.

*Rolling mills.*—The situation of the rolling mills and other manufactories of wrought iron, if not greatly encouraging, is less disheartening than the other metallic industries of the kingdom. In 1878, these establishments employed 13,346 workmen, and produced 403,172 tons of rails, girders, bridge material, and other kinds of rolled iron, whereas in 1877 they employed 196 less workmen, and produced but 378,553 tons, but in consequence of a decline in the mean price of about 10 francs per ton in 1878, the amount of this increase of 24,619 tons was scarcely appreciable, the aggregate value of the product of 1877 being 60,277,083 francs, and that of 1878 60,279,893. The mean price of rolled iron in 1877 was 159.25 per ton, and in 1878 149.25 francs.

Notwithstanding this decline of 10 francs per ton in price realized, so rigid has been the economy forced upon these manufactories by foreign competition and a dull market, and so much to their advantage have they found it to improve and perfect not only their mode of manufacture, but also the article produced, that they have been enabled to keep their mills running at a small profit, and thus afford employment to a large number of workmen, who otherwise would have suffered great distress.

*Manufactories.*—In the general depression of trade that now reigns, the copper, lead, zinc, and glass manufactories of the kingdom have fared no better than the coal and iron interests. All have turned out less quantities of their products, and realized less remunerative prices in 1878 than in former years, and the great subject that now seriously occupies the minds of manufacturers and political economists is to determine whether it is possible to regain that important position which but a few years since Belgium enjoyed as a manufacturing nation.

#### AMERICAN PRODUCTS AND MANUFACTURES IN BELGIUM.

The cheap living and higher wages paid in the United States, to which I referred in a previous report as seductive elements in drawing

off skilled labor from its old centers, are beginning to be seriously felt in this country, as the yearly decreasing value of exports to the United States sufficiently show. Among the chief of these exports, in former years was plate and window glass and glassware, but this trade has now fallen to comparatively insignificant proportions, and it is a fact that not long since a small shipment of specimens of glassware arrived at Antwerp from the United States which for quality, finish, and cheapness, good authorities admitted, could not be surpassed, if indeed equaled, by the best Belgian manufacturers. It is a most significant fact, illustrative of the character of the present reciprocal trade between Belgium and the United States, that notwithstanding our former large purchases of her manufactures, the value of the entire export of the kingdom to the United States in 1878 only amounted to \$2,235,941, and that after glass the next most important articles shipped to our ports were rags, hides, horns, and other crude animal matter. This alone sufficiently proves that if Belgium does not yet buy largely of our manufactures, we at least so supply ourselves as to render it no longer necessary to purchase any considerable quantity of what her manufacturers produce.

In concluding this report, I beg to call the attention of the Department to the fact that, in proportion to her population, Belgium now buys more of our products than any other European country.

Much of this success doubtless has depended upon the peculiar wants of this people and our adaptation to their supply, but there can be no question that much of it has been the result of a persistent and intelligent effort to educate the people into the use of American products by demonstrating their superior qualities and insisting on the economy of their adoption.

That a very large and profitable trade in panel doors, window sash, and other wooden materials used for building purposes could be opened up with this country I have not the least doubt, if our manufacturers of these articles were only to adapt them to the styles now in use here. We cannot expect soon to persuade the people of both France and Belgium that the forms of doors and sash now almost universally in use amongst them are inferior to ours, but by adopting their patterns, with our advantages of cheap material and superior machinery, there can be no question that an immense and profitable export trade of this material could be secured, and, once convinced of the superiority of our wood and workmanship, these people would doubtless gradually adopt our locks, hinges, and window fastenings. In their patterns of these articles the people of continental Europe are probably further behind the age than in anything else, and until we can persuade them to adopt our wooden work it will be folly to expect to sell them our undoubtedly superior locks, hinges, and window fastenings.

This, then, is another field for educational effort, which, if judiciously and energetically pursued, in my opinion, promises the most ample reward; for our magnificent forests of pine and hard wood, with our superior mechanical machinery, give us such vantage ground, that nothing but stubborn prejudice on one or the other side can prevent us from soon monopolizing this important branch of trade.

JNO. WILSON

CONSULATE OF THE UNITED STATES,  
*Brussels, August 30, 1879.*

## SUPPLEMENT TO THE FOREGOING.

*Belgian imports from the United States as compared with imports from other countries.*

In the accompanying table I have indicated under the heads of General exports and imports the value of the entire commerce of Belgium with the countries therein mentioned for the four years ending with 1878, but, as will be observed, have given in separate columns the amount of merchandise imported for home consumption, and that of the exports of strictly Belgian products.

In order to a better comparison of this commerce I have also given the actual balance in favor of or against Belgium in her trade with these countries for each of the four years above named, so that the increase or decline of her imports from, and exports to, each and all of them may be seen at a glance.

It will be observed by a reference to the table that of all the countries there indicated not only was the aggregate balance of trade in favor of the United States largest in 1878, but that the ratio of its increase during the three preceding years greatly exceeded any of them.

On this list of countries Russia stands next to the United States in the magnitude of the balance in her favor, and when her grain and flour trade with this and other continental countries is considered, she may be fairly regarded as a most formidable competitor with the United States in this line of produce. In 1877 the value of her exports to Belgium of flour and grain amounted to 51,881,000 francs and in 1878 to more than 92,000,000 francs, while the value of the imports of these articles from the United States in 1877 only amounted to 32,640,000 francs, and in 1878 to 68,490,000 francs, being more than 24,000,000 francs less than Russia, while that country was engaged in a colossal and expensive war.

There can be but little doubt that the soil and climate of our agricultural regions, taken in connection with our vastly superior labor-saving agricultural machinery and our more perfected mode of handling grain, give us a pre-eminence over every other country in raising cheap food produce, yet it is a most significant fact that in 1878, with all this in our favor, Russia, while involved in a great war and with her ports on the Black Sea closed against the outlet of her commerce, was enabled to transport by expensive routes and sell in the markets of Belgium 24,000,000 francs' worth of these products of her soil more than the United States.

The obvious explanation of this fact is that the producers and exporters of grain and flour in the United States, underestimating the agricultural resources of Russia and other grain-producing countries of Europe and eager for unreasonably large profits, ran up the price of these products to a point that enabled the grain-growing countries of Europe less favored but more content with reasonable profits to throw their grain upon these markets, and thus to a great degree exclude that of the United States held at fancy speculative prices.

This same unwise policy even now threatens to affect seriously our export trade of this produce for 1880 already, not only in Belgium, but in the other grain markets of Europe; purchasers are beginning to recoil from the speculative prices of our exporters, and are looking elsewhere for their supply, and this, in a great measure, accounts for the present unprecedented grain blockade in the shipping ports of the United States.

While justly proud of our superior agricultural advantages, it will not do to presume on them too much, for it ought not to be forgotten that there are yet on this continent vast agricultural districts peculiarly adapted to growing grain, which, if cultivated with greater practical intelligence and the use of labor-saving machinery, may for years to come yield such a supply of bread as will prevent any speculative monopoly in this article from the United States.

The value of the importation of fresh and salted meats from the United States to this country in 1878 amounted to 37,500,000 francs, and exceeded the united import from all the countries of Europe. Whatever competition we may encounter on this continent for the cheap growing of small grain, we have little to fear from rivalry in the growing of meat. A great number of influences, which I need not here mention, stand directly in the way of Europe ever producing a cheap supply of this article, but if we wish greatly to extend our export trade in this article, we must in this too be contented with reasonable profits, for upon the ability of the middle and working classes of this continent to purchase this article of food cheaply will greatly depend the extension of its use. No other means will ever carry this trade, even under the most favorable circumstances beyond the supply of the legitimate wants of those who are not toilers for bread.

On this subject of our exports to Belgium, I wish to call attention to the fact that of the 186,430,000 francs—the total value of these exports to Belgium in 1878—no less a sum than 173,853,000 francs were realized from grain, flour, meat, lard, petroleum, tobacco, and cotton; leaving only a balance of 12,575,000 francs as the total value of all other exports combined, and showing beyond a doubt that it is to the products of our soil we must yet chiefly look for our balances against this country, and suggesting at the same time the importance of securing by every possible manner railroad and transatlantic transportation of these commodities to the markets of Europe; for until we have reduced this to its minimum, we cannot expect to realize the full magnitude of the revenue we ought to derive from the unparalleled agricultural and other national resources of our country.

There is one article of our production the exports of which to this country, both in its raw and manufactured forms, I believe might with proper effort be greatly extended. While it is universally admitted that the United States is the great cotton producing country of the world, it is a singular fact that in 1878 Belgium purchased from France raw cotton to the value of 16,355,000 francs, and from the German Zollverein to the value of 24,769,000 francs; while her direct importation from the United States only amounted to 8,794,000 francs.

She bought from England in 1878 of cotton goods and thread to the amount of 57,905,000 francs, and from the Zollverein to the value of 23,744,000 francs; but not a single yard from the United States.

From personal inquiry among the dealers in these goods, I find that the bleached and unbleached cotton goods of American manufacture which reach this country through England and Germany are regarded as superior in quality; but as they are never sold so cheaply as the same class of goods of English or German manufacture, dealers are unable to realize large sales of them, and consequently continue to purchase English and German fabrics though of admitted inferior quality.

There can be but little doubt that we can furnish Belgium with both

cotton and cotton goods as cheaply as either of these countries, and that with proper effort these large importations of this merchandise could be diverted from them, and made to swell the balance of our now prosperous foreign trade.

JNO. WILSON.

*Commerce of Belgium.*

IMPORTS.

[Indicated by millions and thousands.]

Countries.	1875.	1876.	1877.	1878.	Total.
United States:					
General.....	78,121	120,685	127,970	186,430	512,606
Home consumption.....	70,699	115,904	123,346	175,967	479,796
England:					
General.....	247,598	358,159	318,092	311,432	1,235,281
Home consumption.....	248,275	348,898	312,573	194,353	904,996
France:					
General.....	632,304	578,408	558,531	549,355	2,296,598
Home consumption.....	356,337	352,543	354,043	323,161	1,386,084
Germany:					
General.....	573,744	685,370	540,890	552,517	2,352,520
Home consumption.....	162,571	184,810	197,444	222,196	766,821
Holland:					
General.....	271,309	293,514	306,861	292,136	1,163,711
Home consumption.....	169,536	185,016	196,739	186,967	737,258
Switzerland:					
General.....	27,205	29,814	28,624	19,906	105,549
Home consumption.....	1,771	1,644	1,435	1,247	6,097
Italy:					
General.....	9,397	11,973	15,500	6,963	43,832
Home consumption.....	9,171	11,644	11,435	6,963	39,213
Russia:					
General.....	97,357	124,589	116,914	146,524	485,384
Home consumption.....	81,129	114,757	83,000	129,685	407,571
Norway and Sweden:					
General.....	31,451	32,884	31,959	34,774	131,068
Home consumption.....	27,545	29,305	26,401	26,836	110,087
Denmark:					
General.....	3,124	2,798	1,575	2,390	9,887
Home consumption.....	3,100	2,733	1,436	2,241	9,510
Spain:					
General.....	11,538	12,453	24,125	26,634	74,749
Home consumption.....	11,329	11,968	23,633	22,239	69,169
Portugal:					
General.....	2,983	2,705	3,612	2,519	11,799
Home consumption.....	2,329	2,219	2,890	2,065	9,513
Austria:					
General.....	5,186	5,568	10,149	5,116	26,019
Home consumption.....	174	123	3,976	1,400	5,673

EXPORTS.

United States:					
General.....	32,444	23,397	20,076	16,001	91,918
Home consumption.....	16,554	11,433	10,705	9,307	47,999
England:					
General.....	426,767	412,185	361,147	370,698	1,570,797
Home consumption.....	308,643	191,693	227,714	249,598	877,616
France:					
General.....	573,249	545,949	561,110	561,539	2,241,847
Home consumption.....	344,017	314,137	285,972	329,355	1,273,481
Germany:					
General.....	557,218	549,698	477,329	507,641	2,091,786
Home consumption.....	228,225	227,909	206,685	209,036	871,855
Holland:					
General.....	264,453	284,233	238,392	254,489	1,041,567
Home consumption.....	150,155	165,341	165,972	146,147	627,595
Switzerland:					
General.....	63,723	72,432	54,410	59,934	250,551
Home consumption.....	27,303	31,596	15,239	19,100	93,238
Italy:					
General.....	20,438	16,691	27,497	15,963	80,589
Home consumption.....	17,302	11,596	23,239	13,100	65,237

*Commerce of Belgium—Continued.*

## EXPORTS—Continued.

[Indicated by millions and thousand ls.]

Countries.	1875.	1876.	1877.	1878.	Total.
<b>Russia:</b>					
General	27,489	29,139	32,405	40,257	129,290
Home consumption	18,420	19,272	25,228	22,985	85,855
<b>Norway and Sweden:</b>					
General	13,831	14,811	17,203	12,496	58,341
Home consumption	8,813	10,867	9,441	6,775	35,896
<b>Denmark:</b>					
General	5,516	4,838	5,962	4,444	20,760
Home consumption	3,968	3,963	4,951	2,208	14,199
<b>Spain:</b>					
General	16,447	28,568	26,153	30,563	101,816
Home consumption	9,353	18,487	15,098	18,804	61,736
<b>Portugal:</b>					
General	8,737	10,558	9,720	9,890	38,905
Home consumption	5,269	2,764	3,579	5,723	17,335
<b>Austria:</b>					
General	11,604	7,863	6,203	7,927	33,317
Home consumption	6,543	3,990	3,699	2,948	17,170

## UNITED IMPORTS AND EXPORTS.

<b>United States:</b>					
General	110,565	143,483	148,046	302,431	604,524
Home consumption	87,223	122,337	133,051	185,174	527,785
<b>England:</b>					
General	774,368	770,244	679,269	682,190	2,966,048
Home consumption	457,917	440,560	440,207	443,850	1,782,614
<b>France:</b>					
General	1,263,458	1,122,417	1,129,641	1,110,804	4,568,405
Home consumption	700,354	696,690	650,014	652,516	2,699,564
<b>Germany:</b>					
General	1,130,962	1,186,063	1,017,628	1,060,458	4,395,111
Home consumption	391,798	412,279	398,109	422,134	1,624,318
<b>Holland:</b>					
General	535,653	580,797	603,253	546,625	2,266,328
Home consumption	319,691	350,857	362,489	233,094	1,365,571
<b>Switzerland:</b>					
General	90,928	102,296	78,044	79,842	351,110
Home consumption	23,073	33,310	16,674	20,356	93,313
<b>Italy:</b>					
General	29,835	28,663	42,997	22,896	124,391
Home consumption	26,478	23,210	34,674	19,356	103,713
<b>Russia:</b>					
General	124,846	153,728	149,319	186,781	614,674
Home consumption	89,549	134,029	197,228	152,620	493,426
<b>Norway and Sweden:</b>					
General	45,282	47,665	49,162	47,270	189,469
Home consumption	36,856	39,672	35,842	35,611	147,463
<b>Denmark:</b>					
General	8,640	7,604	7,537	6,824	30,605
Home consumption	7,102	6,685	5,487	4,444	23,718
<b>Spain:</b>					
General	28,006	41,045	50,278	54,117	173,445
Home consumption	20,662	30,475	38,725	41,543	131,425
<b>Portugal:</b>					
General	11,609	18,968	13,833	12,499	56,794
Home consumption	7,588	4,963	6,478	7,789	26,828
<b>Austria:</b>					
General	16,797	16,146	16,343	13,043	62,339
Home consumption	6,717	4,108	7,675	4,348	22,843

## ANTWERP.

*Report, by Consul Stuart, on the commerce and navigation of Antwerp for the years 1878 and 1879.*

In accordance with consular regulations, I have the honor to hand you my annual report upon the trade of this consular district for the year 1878, accompanied by tabular statements of imports, exports, and navigation, carefully compiled from official sources. The quantities given have been taken from the report of the *Société Commerciale*, and may be relied upon as correct. The values have been computed from an official tariff of prices prepared by the government and corrected annually. They are determined by the average of actual sales and by the prices current of the country.

In order to understand thoroughly the tables hereto attached, I give the following explanation of what they are intended to show, viz:

Table A (special imports) embraces imports of merchandise declared for consumption or for bonded warehouses.

Table B (special exports) includes merchandise of Belgian origin and foreign merchandise that has been assimilated to the home products by the payment of the entry duty or by having been declared for transformation or consumption and afterwards exported.

Table C (commerce of transit), by the port of Antwerp: It consists of two kinds, direct and indirect. Direct transit is where the article simply passes through the country under custom-house seal, and it is not included in the Tables A and B.

In direct transit is divided into three classes: First, where merchandise is stored in government warehouses and exported; second, where it has been admitted temporarily for purposes of manufacture or refinement and afterwards exported; third, where merchandise not dutiable has been declared for consumption and afterwards exported. These three classes are embraced in Tables A and B.

Tables D and F give the general navigation and the navigation of American vessels at the port of Antwerp for the year 1879.

Table E gives the value of declared exports from this consular district to the United States for the years 1877 and 1878.

Tables G and H give a comparative statement of the quantity and value of the direct general importations and exportations between *Belgium* and the United States for the years 1877 and 1878.

## INCREASE OF COMMERCE.

In order to show the rapidly increasing development of the commerce of Antwerp, I present the following statement giving the quantities of the general importations into this port for the years 1865, 1870, 1875, and 1878, as follows:

Articles.	1865.	1870.	1875.	1878.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Chemicals, soda.....	16,352	26,870	25,639	23,849
Coal.....	3,997	33,726	214,785	170,485
Coffee.....	22,008	24,882	31,589	32,758
Cotton.....	6,176	14,436	30,515	22,433
Flour and pastes.....	4,014	7,708	4,744	16,728
Grains:				
Wheat.....	33,398	133,030	215,356	422,583
Barley.....	11,025	30,588	51,542	152,274

Articles.	1865.	1870.	1875.	1878.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Grains—Continued.				
Corn and oats.....	4, 413	62, 635	100, 825	173, 884
Barley.....	26, 534	55, 116	85, 895	149, 852
Guano and other manures.....	23, 089	85, 074	86, 103	88, 838
Hides, untanned.....	18, 910	27, 286	81, 546	27, 975
Iron:				
Mineral.....	128	545	20, 934	48, 348
Cast and scrap.....	27, 219	99, 789	119, 658	97, 495
Bar, sheet, wires.....	2, 098	4, 670	8, 161	9, 173
Lard and tallow.....	4, 912	12, 033	15, 996	22, 452
Meat.....	298	1, 149	4, 150	29, 592
Oil seeds.....	69, 893	46, 064	77, 261	66, 754
Petroleum.....	21, 293	49, 804	96, 258	115, 807
Resin and bitumen.....	26, 575	35, 512	52, 348	88, 780
Rice.....	23, 810	30, 974	52, 917	42, 987
Salt:.....	11, 317	20, 394	39, 540	12, 785
Sugar.....	19, 558	33, 636	23, 066	19, 373
Tobacco, leaf.....	2, 287	6, 905	6, 338	11, 768
Wood, building-timber.....	171, 996	145, 878	210, 880	216, 230
Wools.....	37, 838	51, 836	80, 833	71, 411
Other.....	180, 447	291, 109	124, 461	814, 349
Total.....	768, 890	1, 330, 794	1, 851, 190	2, 388, 893

The foregoing table shows an increase for 1878 of nearly 30 per cent. over the quantity given for 1875, while it is more than three times as much as the importation in 1865, and almost double that of 1870. I cannot give any estimate yet for the present year, 1879, but it will show an increase over the past year in quantities and value.

## IMPORTS.

The total value of special imports to this port during the year 1878 was (as per Table A) 959,754,505 francs, and the value of imports for direct transits (as per Table C) was 132,560,339 francs, making a total of general imports into Antwerp of 1,092,314,844 francs, being an increase of 67,656,561 francs over the amount of general imports for 1877.

The following table gives a comparative statement of the values of the principal articles imported into Antwerp during the years 1877 and 1878, in the order of their importance:

Articles.	1878.	1877.	Increase.	Decrease.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Grain and flour.....	232, 308, 790	151, 242, 900	81, 065, 890	
Wool.....	224, 464, 300	242, 248, 750		17, 783, 950
Coffee.....	66, 257, 900	54, 522, 500	11, 735, 300	
Hides and skins.....	47, 331, 358	45, 078, 287	2, 253, 071	
Meat.....	44, 253, 000	25, 231, 500	19, 021, 500	
Yarn and thread.....	43, 689, 000	33, 578, 750	10, 110, 250	
Textile fabrics.....	34, 918, 467	33, 001, 880	2, 916, 587	
Cotton.....	31, 871, 000	31, 905, 000		33, 400
Metals and minerals.....	29, 193, 460	28, 437, 940	755, 520	
Petroleum.....	28, 951, 750	38, 196, 050		9, 244, 300
Guano and compost.....	27, 666, 540	22, 359, 480	5, 307, 060	
Seeds.....	26, 574, 000	23, 605, 570	2, 968, 430	
Wood.....	24, 481, 077	30, 326, 798		5, 845, 716
Lard and tallow.....	21, 329, 400	22, 856, 000		1, 527, 500
Tobacco and manufactures of.....	21, 376, 100	16, 496, 600	4, 889, 440	
Oils.....	14, 898, 569	15, 742, 700		844, 200
Sugar.....	12, 986, 610	17, 581, 074		4, 594, 464
Rice.....	12, 093, 020	18, 667, 500		6, 674, 480
Copper and nickel.....	9, 801, 765	12, 528, 657		2, 726, 892
Chemicals.....	7, 683, 198	14, 742, 106		7, 058, 908
Iron.....	5, 620, 360	10, 464, 370		4, 844, 010
Other.....	124, 563, 749	136, 852, 916		12, 289, 167
Total.....	1, 092, 314, 844	1, 024, 658, 233	141, 023, 548	73, 366, 987
Total increase over 1877.....			67, 656, 561	



An increase is observed in grain of 81,000,000 francs; in coffee, nearly 12,000,000; meat, 19,000,000; yarn and thread, 10,000,000; guano, 5,000,000; tobacco, nearly 5,000,000; textile fabrics, 3,000,000; seeds, 3,000,000; hides and skins, over 2,000,000 francs.

The following articles show a decrease, viz: Wool, nearly 18,000,000 francs; petroleum, 9,000,000; wood, 6,000,000; rice, 6,500,000; chemicals, 7,000,000; iron, 5,000,000; sugar, 4,600,000; copper and nickel, 2,700,000; and hard tallow, 1,500,000 francs.

The decline in wool and sugar was occasioned by both a decrease in the quantity imported and a reduction in the price. In rice and chemicals there was a falling off in quantity, but in lard, and tallow, and petroleum, there was really an increase in the quantity imported, say 1,600 tons of the former, and 6,700 tons of the latter article, while the decline in prices places the value for 1878 below that of the smaller quantity imported in 1877.

#### EXPORTS.

The total value of special exports (Table B) from Antwerp for the year 1878 was 375,213,000 francs, being an increase of 5,893,602 francs, or 2 per cent. over 1877.

The value of the special exports cleared at the Antwerp custom-house and carried out in vessels was 293,565,000 francs, being an increase of 3,719,000 francs over the preceding year.

The following table shows the value of the principal special exports from the port of Antwerp for 1878 as compared with 1877:

Articles.	1878.	1877.	Increase.	Decrease.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Yarn and thread .....	47,468,000	30,727,725	16,740,275	
Textile fabrics .....	38,991,783	31,741,555	7,250,228	
Grain and flour .....	38,933,300	31,287,835	7,665,465	
Iron .....	28,808,414	45,759,120		16,950,706
Glass .....	29,205,082	29,959,897		754,815
Machinery .....	23,552,400	6,811,400	16,741,000	
Paper .....	19,497,000	15,976,800	3,520,200	
Sugar .....	15,605,320	21,724,250		6,118,930
Hides and skins .....	13,273,800	10,558,908	2,714,892	
Candles .....	10,496,500	10,490,000	6,500	
Zinc .....	10,331,750	10,278,892	52,858	
Fruits .....	8,580,000	3,279,540	5,300,460	
Lard and tallow .....	6,364,050	10,628,400		4,264,350
Arms .....	6,247,827	5,901,148	346,681	
Stones .....	5,100,228	5,916,055		815,827
Animals .....	4,979,102	10,727,461		5,748,359
Steel .....	4,540,000	1,777,600	2,762,400	
Meat .....	4,321,500	3,960,000	361,500	
Guano and compost .....	3,388,000	5,641,020		2,253,020
Other .....	55,578,999	76,191,794		20,612,795
Total .....	375,213,000	369,319,398	5,893,602	67,568,857
Total increase .....				

The articles showing an increase are yarn and thread, and machinery, each nearly 17,000,000 francs; also, grain and flour, textile fabrics, fruits, paper, hides and skins, and steel. The diminution takes place principally in iron, 17,000,000 francs; also, in sugar, animals, lard, tallow, and guano.

#### NAVIGATION.

The statement of the navigation of the port of Antwerp (Table D) shows that during the year 1878 there arrived at this port 4,583 vessels of all nationalities, aggregating a tonnage of 2,779,956, being an increase over 1877 of 347 vessels and 424,973 tons.

The arrivals from the United States were 84 steamers and 373 sailing vessels, with a tonnage of 438,221, being second in magnitude, and an increase of 90 vessels and 139,872 tons over 1877.

The total number of vessels clearing from this port was 4,534, with a tonnage of 2,743,970, being an increase over 1877 of 326 vessels and 275,512 tons.

The departures for the United States were 52 steamers and 275 sailing vessels, with a tonnage of 325,070, being an increase over 1877 of 60,240 tons.

#### ARRIVALS, BY FLAG.

The following table shows the nationality and tonnage of the vessels arriving at Antwerp during the year 1878:

Nationality.	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
English .....	1,655	1,345,287	416	212,943	2,071	1,557,639
German .....	224	204,227	238	72,504	462	276,731
Belgian .....	337	233,360	14	7,974	351	241,334
Norwegian .....	38	19,406	267	119,578	305	138,983
French .....	123	80,144	150	38,102	273	108,246
Danish .....	95	88,714	128	19,474	221	108,188
Swedish .....	124	72,439	65	20,162	189	92,601
Dutch .....	371	76,253	43	8,554	414	85,077
Spanish .....	52	32,864	51	18,023	103	50,887
United States .....			45	43,660	45	43,660
Italian .....			63	35,365	63	35,365
Russian .....	4	3,466	40	14,355	44	17,821
Portuguese .....	20	11,000	1	92	21	11,092
Austrian .....			17	9,736	17	9,736
Greek .....	2	1,945	1	506	3	2,451
Argentine Republic .....			1	154	1	154
Total .....	3,045	2,169,374	1,538	610,582	4,583	2,779,956

The above figures show an increase of 329,000 tons over 1877, and the increase extends to all nationalities except Spain and the United States, the largest increase being 130,000 tons for the English flag.

The navigation by steamers is nearly 80 per cent. of the whole tonnage, and of this England has over 60 per cent. The only countries not represented by steamers are Austria, Italy, and the United States.

#### AMERICAN VESSELS.

As shown in Table F, there were 44 American vessels entered at this consulate during 1878, viz, 22 ships, 18 barks, and 4 schooners, with a registered tonnage of 45,352 tons; of these, 6 came from Baltimore, 2 from Boston, 5 from Philadelphia, 3 from New Orleans, 8 from New York, 1 from Portland, 14 from Peru, 1 from Chili, 1 from Buenos Ayres, 2 from Dantzic, and 1 from Africa. The cargoes were estimated at \$3,790,037, of which \$1,989,000 was guano from Peru, \$1,540,000 was petroleum, wheat, cotton, lard, tobacco, and general cargo from the United States; \$113,000 wool and hides from Buenos Ayres, and \$40,000 palm oil from Africa. Of the American vessels clearing during 1878, 29 went out in ballast, 5 were partly laden with empty barrels, 6 took out a general cargo to Brazil, 1 took general cargo for Cape Breton, 1 took general cargo for Sydney, and 1 was sold. The estimated value of the outgoing cargoes was \$310,675.

The number of arrivals of American vessels for the first three quarters

of the present year 1879 has been 34, with a tonnage of 43,279 tons, showing as compared with the same period in 1878 the same number of vessels, but an increase in the tonnage of 9,455 tons. Their cargoes consisted of petroleum, rice, wheat, and guano. They cleared mostly in ballast, some of them partly laden with old iron and empty barrels. All the outward cargo for the United States is carried by steamers, and they are now having as much and more offered than they can carry. One of the direct steamer lines between this port and New York and Philadelphia, the Red Star, will make an addition to their fleet in a few months of a fine new steamer.

#### EMIGRATION.

In 1871 there was no direct emigration from this port, but since the establishment of transatlantic steamship lines the opportunities offered thereby are being availed of, as shown by the following table of direct emigration from Antwerp during the last three years :

Destination.	1876.	1877.	1878.
New York.....	1,237	1,460	1,329
Philadelphia.....	1,962	2,196	1,627
Buenos Ayres.....	821	217	.....
Rio Janeiro.....	3,304	1,079	2,225
Rio Grande-do-Sul.....	50	130	.....
Total.....	7,874	5,082	5,192

It will be seen that, according to the above figures, the direct emigration to the United States has fallen off 700 persons, and that to Brazil has increased 1,026. The indirect emigration from here by the way of Liverpool has been about 2,500 persons.

At present the steamers of the Red Star Line are carrying, every trip, a number of Italian emigrants, and they seem to be surely a most undesirable addition to the population of any country. They are sent this way probably on account of lower fare being offered than by other lines. The Belgian Government is doing all in its power for the comfort and protection of the emigrants passing through this country.

#### EXPORTS TO THE UNITED STATES.

During the year 1878 there were legalized at this consulate 292 invoices, with a declared value (as shown in Table E) of \$712,934.23, being a decrease of \$227,349.99 compared with the previous year.

I also hand a statement showing the value of the declared exports for the four quarters of the year ending September 30, 1879. This statement shows an increase of \$58,429.75 over the preceding corresponding year, but this increase is caused by the great amount of empty petroleum barrels sent to the United States, the value of which is declared \$180,000 in advance; old iron rails, scraps, and puddle bars, for which there was a great demand from America, were exported to the amount of \$59,000, but with these exceptions there was a great falling off in all articles of exportation, notably in hides and skins, sugar, spiegeleisen, extract of meat, &c. Were it not for the amount of empty petroleum barrels that enters so largely into the list of exports, the value would be trifling, and will grow less because there is scarcely an article of Belgian production that can be profitably exported to come into competition with our home products.

## POPULATION.

The population of the city of Antwerp on the 31st of December, 1878, was registered at 169,981 souls, composed of 88,224 male and 81,757 female, an increase over the preceding year of 3,887, namely, 1,833 males and 2,004 females. The males were 6,467 in excess of the females, and the excess of births over deaths was 2,351.

## MARRIAGES, BIRTHS, AND DEATHS.

The total number of marriages during 1878 was 1,335, and the number of divorces 7. The number of births was 6,217, namely, 3,145 male and 3,072 female. The illegitimate births were 390 male and 385 female, making a total of 775. During the year 129 illegitimate children were recognized, and 292 were made legitimate according to law.

The whole number of deaths during the year, exclusive of 288 still-born, was 3,784, being 136 less than the preceding year, and being a death rate of about 22.3 per thousand.

## IMPROVEMENT OF ANTWERP.

During 1878 there were 643 houses erected in the city and 53 taken away, leaving a total number on the 31st December of 23,101 houses. We have some reason to hope that the difficulties surrounding the building of the water-works may soon be removed, and the work commenced, as the want of pure soft water is greatly felt. Great improvements are now being made in the docks, and more are in contemplation. In a few years there will be all conveniencies offered for vessels, and every facility for the handling of cargoes and their transmission from coast vessels and vice versa, a want that is now greatly felt.

## TRADE BETWEEN THE UNITED STATES AND BELGIUM.

The report of the minister of finance in Brussels places the total value of importations from all countries at 2,383,771,000 francs, of which amount the United States contributed (as per Table G) 186,430,000 francs, ranking fifth in importance, and being about 8 per cent. of the whole. This sum shows an increase over the amount imported from the United States in 1877 of 58,459,650 francs. The above total comprises 10,563,000 francs of merchandise imported in transit through Belgium for other countries, especially hides and tobacco.

The following table presents, in a condensed form, the values of the principal articles of import from the United States to Belgium for the past three years:

Articles.	1878.	1877.	1876.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Grain and flour.....	68,715,384	82,640,000	28,888,775
Meat.....	37,510,705	20,597,968	13,229,016
Petroleum.....	28,866,788	38,044,048	33,906,774
Tobacco.....	13,889,515	7,514,206	9,789,793
Lard and tallow.....	13,513,505	12,090,239	11,523,136
Cotton.....	8,793,658	3,661,135	8,962,553
Coffee.....	3,139,189	2,365,710	2,178,684
Resin and bitumen.....	2,787,188	2,269,892	1,530,556
Hides and skins.....	2,438,700	2,919,768	6,236,095
Wool.....	1,038,068	547,290	.....
Others.....	5,742,275	5,321,549	3,748,573
• Total.....	186,430,000	127,970,350	120,084,555

An increase is observable in every article mentioned above, with the exception of petroleum, and hides and skins, in which the decline was small, and the decline in petroleum was owing, not to decrease in the quantity imported, but to a fall in prices. The greatest increase is in the value of grain and flour, it being more than double the preceding year, and in meat and tobacco it is nearly double. The total increase for 1878 is over 45 per cent. of the total importation for 1877.

#### GRAIN AND FLOUR.

*Flour.*—The quantity of flour imported in 1878 shows a large increase, being 3,612 tons against 1,368 tons in 1877.

*Wheat.*—The quantity of wheat imported from the United States during 1878 was 188,274 tons against 72,894 tons in 1877, being more than two and a half times as much, or an increase of 150 per cent.

Prices at the beginning of the year 1878 ranged about 33 francs per 100 kilograms, or 330 francs per ton; but at the end of January, when the preliminaries of peace between Russia and Turkey were signed, and the blockaded ports reopened, the price fell about 20 francs per ton. In the month of April there was a heavy demand, and the price rallied a little, say to 317.50 francs per ton, but this advance was speedily lost under the pressure of the heavy arrivals from America and from Odessa, so that at the end of the year the price was 250 francs per ton.

During the first nine months of 1879 the importation of wheat from the United States (large quantities coming from California) only for consumption, has reached the large amount of 248,585 tons, or 50 per cent. of the total importation from all countries. The price at the end of October, in spite of the heavy arrivals, was 320 francs per ton.

*Corn and oats.*—The quantity imported from the United States in 1878 was 34,013 tons against 10,654 in 1877, being a large increase. During the first nine months of 1879 there had been imported 31,483 tons.

*Rye.*—The importation of rye shows a falling off, being only 19,467 tons in 1878 against 25,803 tons in 1877, but during the first nine months of the present year it has received a great impetus, and 41,108 tons have been received from America.

#### MEAT.

Of all the European ports Antwerp has profited most by the development of the American meat trade, not only finding a large market at home, but by being the transit depot for Germany, Switzerland, Austria, and the northern countries. The quantity imported in 1878 was 25,007 tons as compared with 13,732 tons in 1877. Dry salted shoulders were imported regularly during 1878, and in the summer the price was comparatively high, but in October it became weaker, and in December fell from 62 to 48 francs per 100 kilograms. Dry salted hams were worth in June, 1878, from 100 to 108 francs per 100 kilograms, according to weight and quality; in August, buyers had to pay from 125 to 135 francs, but from this time the price declined until it reached at the end of the year 80 francs.

Smoked hams were imported regularly and largely by the direct line of steamers, and found a ready market, not only in Belgium but also in Germany, in the north of France, and in England. The price varied from 145 francs in January to 115 francs in June; in August it rallied to 150 and 155 francs, but fell off again in October to 120 and 125 francs; in November, 110 and 120, and in December 105 and 110 francs per 100 kilograms.

The preserved meats from Australia, Texas, and South America suffered from the competition with the pressed meat from Chicago and Saint Louis, which was imported in large quantities. The import of fresh meat and live cattle is increasing.

During the first nine months of 1879 the import of meat from the United States into Belgium was 29,092 tons; and the present prices are, for dry salted shoulders, 60 to 62 francs; dry salted hams, 102 francs, and smoked hams, 125 to 135 francs per 100 kilograms.

#### PETROLEUM.

The quantity of refined petroleum imported during 1878 was a little larger than last year, and was the largest ever received at this port. I give below a table of receipts:

Description.	1878.	1877.	1876.
Petroleum, refined.....barrels..	806, 823	792, 597	605, 090
Do.....cases..	1, 000	200	.....
Petroleum, crude.....barrels..	11, 858	40, 140	28, 848
Naphtha.....do.....	16, 963	35, 478	17, 988
Do.....cases..	2, 869	3, 167	3, 112
Others.....barrels..	4, 117	1, 000	1, 900
Total.....barrels..	839, 750	869, 315	653, 824
Total.....cases..	3, 869	3, 367	3, 112
Grand total.....packages..	843, 619	872, 682	656, 936

The above table shows a considerable increase in the quantity of refined and a proportionate decrease in the quantity of crude oil and naphtha imported. The quantity shipped from the port of Philadelphia was 414,346 barrels, or 50 per cent. of the whole amount. The price at the opening of the year 1878 was 31 francs, but it declined gradually until at the close of the year it would bring only 21½ francs per 100 kilograms. At the present date, November 28, 1879, the stock on hand is reported at 165,104 barrels, and the price from 22½ to 23 francs.

#### RESIN.

The American resin is constantly growing in favor, and the imports for 1878 were 58,156 barrels against 33,432 barrels in the preceding year, and the stock on hand at the end of the year was about 10,000 barrels, at which time the price was 10½ francs for brown, and from 12½ to 16½ francs for 100 kilograms for the brown clear.

#### SPIRITS OF TURPENTINE.

The importation of this article from the United States is continually increasing, and on account of the large production and low freights is sold cheaper than the French turpentine. Some consumers still prefer the French on account of its superior refinement, but from recent improvements introduced the American product is beginning to rival the French in purity and odor. The price in December, 1878, was, for American, from 56½ to 60 francs per 100 kilograms, and for French, from 60 to 61 francs.

#### TOBACCO.

The transactions in tobacco in 1878 received a great development and were probably the largest for a quarter of a century past. The importa-

tions from the United States increased from 4,056 tons in 1877 to 8,240 tons in 1878, and a good business was maintained during the year.

The importation from the United States is almost entirely Kentucky grown tobacco; a small quantity comes also from Virginia, but for Maryland and Ohio the purchases seek the markets of Holland and Germany.

#### LARD.

The importation of this article was larger considerably in 1878 than in 1877, but the demand was very quiet during the year, and purchases were made, both for consumption and exportation of quantities only sufficient for immediate wants.

The price of the Wilcox brand, which is generally preferred, and in which the largest business is done, varied from 109 to 82 francs for 100 kilograms during the year. In November of the present year, 1879, the price is quoted at from 92 to 96 francs for 100 kilograms.

#### COTTON.

Although the importation of cotton from the United States in 1878 was greater than in 1877, the total importation from all countries was less, and the great fluctuation in prices was unfavorable to transactions. Up to the time of the arrival of new crop from America, the stock of the raw material on hand was not sufficient for the demand for immediate consumption. At one time the deficit in the raw material, as compared with 1877, was nearly 700,000 bales, and the result was that the raw material demanded a higher price than the manufactured article. The price for middling Louisiana descended from 78 francs in January, 1878, to 72 francs per 50 kilograms in May, raised again to 79 to 80 francs in August, and at the close of the year was only 63 francs per 50 kilograms. The price in November, 1879, was about 85 francs per 50 kilograms.

#### EXPORTS.

The total value of general exports from Belgium to the United States was, in 1878, 16,000,748 francs, being a decrease of 4,275,477 francs, as shown by Table H, hereto attached. The principal increase took place in drugs, sugar, laces, hardware, and fancy goods and objects of art. The decrease was in glass, both window and plate, iron of all kinds, hides untanned, rags, wool, and wines.

#### COMMERCE OF BELGIUM FOR NINE MONTHS OF 1879.

From an official comparison just published of the commerce of the first nine months of 1879, as compared with 1878, I find an increase in importations as follows: wheat, rye, oats and corn, flour, tobacco, meat, rice, flax, butter and lard, and tallow. A decrease in iron, barley, guano, wool, cattle, eggs, and silk.

The increase in exportations occurs in wheat, rye, steel, lard and tallow, meat, flax, iron, stone, rice, sugar, and zinc. A decrease is shown in machinery, woollen goods, cattle, wood, paper, raw hides, and cotton goods.

JOHN H. STEUART.

UNITED STATES CONSULATE,  
*Antwerp, December 8, 1879.*

A.—Statement showing the commerce at Antwerp for the year ending December 31, 1878.

## IMPORTS.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Animal substances</b> .....		<i>France.</i> 2,868,830	Free	Argentine Republic.
Do.....		679,341	do	England.
Do.....		500,091	do	United States of America.
Do.....		494,172	do	Germany.
Do.....		1,125,285	do	Brazil, France, Holland, Russia, Spain.
<b>Total</b> .....		5,185,819		
<b>Animals, horses</b> .....number.	819	655,200	18 francs per head.	England.
Do.....do..	2	1,600	do	Argentine Republic.
Do.....do..	1	800	do	United States.
<b>Total</b> .....	822	657,600		
<b>Arms</b> .....		615,809	Free	Germany.
Do.....		461,988	do	England.
Do.....		147,581	do	France.
Do.....		76,100	do	Holland.
Do.....		22,609	do	United States.
Do.....		14,864	do	Sweden and Norway, Portugal, Spain.
<b>Total</b> .....		1,888,401		
<b>Beer</b> .....hectoliters.	7,852	196,300	6 francs per hectoliter.	England.
Do.....do..	7,348	183,700	do	Germany.
Do.....do..	1,083	25,825	do	Holland.
Do.....do..	115	2,875	do	France, Sweden and Norway.
<b>Total</b> .....	16,348	408,700		
<b>Books and charts</b> .....tons.	15	97,500	Free	France.
Do.....do..	84	55,250	do	England.
Do.....do..	6	39,000	do	Germany.
Do.....do..	1	66,500	do	United States.
Do.....do..	24	16,250	do	Holland, Italy.
<b>Total</b> .....	33	214,500		
<b>Brandy and gin</b> .....hectoliters.	11,153	601,486	145 francs per hectoliter.	Germany.
Do.....do..	815	50,530	do	France.
Do.....do..	619	38,378	do	Holland.
Do.....do..	668	41,418	do	England, Russia, Italy.
<b>Total</b> .....	13,255	821,810		
<b>Butter</b> .....tons.	71	205,900	Free	Holland.
Do.....do..	16	45,400	do	Germany.
Do.....do..	10	29,000	do	France.
Do.....do..	10	29,000	do	United States.
Do.....do..	4	11,600	do	England.
<b>Total</b> .....	111	321,900		
<b>Candles</b> .....		6,589	10 per cent.	England.
Do.....		3,989	do	France.
Do.....		1,262	do	Holland.
Do.....		1,360	do	United States, Germany, Italy.
<b>Total</b> .....		13,209		
<b>Carriages</b> .....		21,814	10 per cent.	England.
Do.....		1,940	do	France, United States, Holland.
<b>Total</b> .....		23,754		
<b>Chalk</b> .....tons.	51	816	Free	France.
Do.....do..	23	368	do	England, Holland.
<b>Total</b> .....	74	1,184		



A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
Cheese ..... tons..	1,104½	Francs. 1,064,250	100 francs per ton.	Holland.
Do ..... do.	11	16,500	do	Germany.
Do ..... do.	10	15,000	do	France.
Do ..... do.	6	9,000	do	United States.
Do ..... do.	10½	15,750	do	England, Switzerland, Italy.
Total .....	1,147	1,730,500		
Chemicals:				
Soda ..... tons.	15,129	3,782,250	Free	England.
Do ..... do.	7,891	1,972,750	do	Peru.
Do ..... do.	589	124,750	do	Germany.
Do ..... do.	277	60,250	do	United States.
Do ..... do.	11	2,750	do	Holland, France.
Total .....	23,847	5,961,750		
Not specified ..... tons.	5,645	1,411,250	Free	England.
Do ..... do.	418	104,500	do	Germany.
Do ..... do.	315	78,750	do	Holland, France, Russia.
Total .....	6,378	1,594,500		
Clothing .....		298,428	10 per cent.	England.
Do ..... do.		53,684	do	Germany.
Do ..... do.		44,004	do	France.
Do ..... do.		4,702	do	Holland, Sweden and Norway, United States, &c.
Total .....		400,828		
Coal ..... tons.	87,260	1,308,900	Free	Holland.
Do ..... do.	70,586	1,058,040	do	England.
Do ..... do.	249	3,735	do	United States, Germany, Russia.
Total .....	158,045	2,370,675		
Cocoa ..... tons.	141	324,300	150 francs per ton.	France.
Do ..... do.	62	142,600	do	Germany.
Do ..... do.	57	131,100	do	England.
Do ..... do.	22	50,600	do	Portugal.
Do ..... do.	8	18,400	do	Holland, Brasil, Hayti.
Total .....	290	667,000		
Copper and nickel:				
Crude ..... tons.	3,850	8,489,800	Free	England.
Do ..... do.	204	448,800	do	Chili.
Do ..... do.	20	44,000	do	United States.
Do ..... do.	12	28,400	do	Holland.
Do ..... do.	14	30,800	do	France, Germany, Peru.
Total .....	4,100	9,089,800		
Bar and sheet ..... tons.	197	512,300	10 per cent.	England.
Do ..... do.	4	19,400	do	United States.
Do ..... do.	8	7,800	do	France.
Total .....	204	539,400		
Coffee ..... tons.	14,481	25,341,750	132 francs per ton.	Brasil.
Do ..... do.	6,953	12,167,750	do	France.
Do ..... do.	2,469	4,390,750	do	England.
Do ..... do.	2,186	6,120,800	do	Holland.
Do ..... do.	2,151	3,764,250	do	Hayti.
Do ..... do.	2,095	3,693,250	do	Germany.
Do ..... do.	1,794	3,120,500	do	United States.
Do ..... do.	311	544,250	do	Portugal, Argentine Republic, Spain.
Total .....	32,440	59,065,300		

A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Cordage.</b>				
.....tons.	187	France. 191,800	Free	England.
Do.....do.	15	21,000	do	Russia.
Do.....do.	5	7,600	do	Sweden and Norway.
Do.....do.	9	12,600	do	Germany, Holland, France, United States.
Total .....	166	232,400		
<b>Cotton.</b>				
.....tons.	10,474	14,633,600	Free	France.
Do.....do.	5,186	8,265,600	do	United States.
Do.....do.	4,912	6,876,800	do	England.
Do.....do.	921	1,478,600	do	Argentine Republic.
Do.....do.	165	231,000	do	Germany.
Do.....do.	210	305,000	do	India, Brazil, Holland, Switzerland.
Total .....	21,848	31,815,000		●
<b>Drugs.</b>				
.....tons.	3,285	194,100	Free	Sweden and Norway.
Do.....do.	494	839,800	do	England.
Do.....do.	270	458,000	do	Holland.
Do.....do.	253	436,100	do	France.
Do.....do.	165	220,500	do	Germany.
Do.....do.	147	249,900	do	Spain.
Do.....do.	105	178,500	do	Italy.
Do.....do.	109	185,200	do	Algeria, United States, Russia, Austria.
Total .....	4,778	2,517,200		
<b>Fish.</b>				
.....tons.	3,000	1,080,000	Free	Holland.
Do.....do.	1,940	698,400	do	England.
Do.....do.	146	53,500	do	Sweden and Norway.
Do.....do.	77	27,720	do	United States, Germany, France.
Total .....	5,163	1,858,680		
<b>Forage.</b>				
.....tons.	841	27,280	Free	Holland.
Do.....do.	92	7,380	do	England.
Do.....do.	31	2,480	do	Germany.
Total .....	464	37,120		
<b>Flax and hemp.</b>				
.....tons.	5,974	7,768,200	Free	Russia.
Do.....do.	5,678	7,381,400	do	England.
Do.....do.	4,174	5,428,200	do	Germany.
Do.....do.	1,118	1,453,400	do	Algeria.
Do.....do.	927	1,205,100	do	Brazil, Italy, France, Holland, Spain.
Total .....	17,871	23,232,300		
<b>Flour and biscuit.</b>				
.....tons.	6,506	3,903,600	Free	Germany.
Do.....do.	4,009	2,405,400	do	Holland.
Do.....do.	3,854	2,312,400	do	United States.
Do.....do.	1,047	628,200	do	Russia.
Do.....do.	835	501,000	do	England.
Do.....do.	270	162,000	do	France.
Do.....do.	147	88,200	do	Portugal, Austria, Spain, Turkey, Italy.
Total .....	16,668	10,000,800		
<b>Fruit:</b>				
<b>Almonds.</b>				
.....tons.	70	189,000	200 francs per ton	Italy.
Do.....do.	50	135,000	do	Spain.
Do.....do.	32	88,400	do	Portugal.
Do.....do.	32	88,400	do	France.
Do.....do.	31	88,700	do	Germany, Holland, &c.
Total .....	215	589,500		
<b>Oranges, lemons, and figs.</b>				
.....tons.	2,545	1,272,500	60 francs per ton.	Spain.
Do.....do.	1,251	625,500	do	Italy.
Do.....do.	484	227,000	do	England.
Do.....do.	217	108,500	do	Holland.
Do.....do.	337	168,500	do	Portugal, France, &c.
Total .....	4,804	2,402,000		

A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<i>Francs.</i>				
<b>Fruit—Continued.</b>				
Prunes.....tons.	244	341,600	150 francs per ton	Germany.
Do.....do.	191	267,400	do	France.
Do.....do.	62	86,800	do	Austria, England, Greece.
Total.....	497	695,800		
Grapes.....tons.	2,784	1,948,800	150 francs per ton	Greece.
Do.....do.	561	392,700	do	England.
Do.....do.	234	163,800	do	Holland.
Do.....do.	164	114,800	do	Spain.
Do.....do.	189	132,300	do	Italy, France, Portugal, Turkey.
Total.....	3,992	2,752,400		
Not specified.....		223,133	10 per cent.	England.
Do.....		134,437	do	Italy.
Do.....		55,651	do	Germany.
Do.....		40,374	do	France.
Do.....		25,742	do	Holland.
Do.....		21,107	do	United States, Spain.
Total.....		500,464		
Glass.....		24,409	10 per cent.	France.
Do.....		23,562	do	Germany.
Do.....		13,794	do	England.
Do.....		4,458	do	Holland.
Do.....		2,989	do	Austria, Switzerland, Italy, Denmark.
Total.....		69,157		
Glassware.....tons.	191	30,560	10 per cent.	Germany.
Do.....do.	41	6,560	do	England, Holland, France.
Total.....	232	37,120		
Grain:				
Wheat.....tons.	188,274	54,599,460	Free	United States.
Do.....do.	115,598	33,523,420	do	Germany.
Do.....do.	97,273	28,208,170	do	Russia.
Do.....do.	6,594	1,912,280	do	England.
Do.....do.	5,782	1,676,780	do	Denmark.
Do.....do.	4,183	1,198,370	do	Holland.
Do.....do.	4,925	1,428,250	do	Sweden and Norway, Austria, Spain.
Total.....	422,579	122,547,910		
Corn and oats.....tons.	92,408	18,480,600	Free	Russia.
Do.....do.	34,012	6,802,400	do	United States.
Do.....do.	21,872	4,274,400	do	Germany.
Do.....do.	11,350	2,270,000	do	Sweden and Norway.
Do.....do.	14,747	2,948,400	do	Holland, Turkey, Austria, Italy, Argentine Republic.
Total.....	178,884	34,776,800		
All other kinds.....tons.	201,780	42,728,760	Free	Russia.
Do.....do.	33,228	8,687,200	do	Turkey.
Do.....do.	24,202	4,962,680	do	United States.
Do.....do.	24,485	5,448,290	do	Germany.
Do.....do.	12,295	2,802,350	do	Holland, Austria, Italy, Spain, Portugal.
Total.....	300,950	64,650,290		
Guano and other manures, tons	71,940	23,740,200	Free	Peru.
Do.....	6,851	2,260,830	do	France.
Do.....	4,409	1,454,970	do	England.
Do.....	638	210,540	do	Uruguay, States.
Total.....	83,838	27,666,540		Holland, United
Gutta percha.....tons.	51	178,500	Free	England.
Hardware and fancy goods.....		209,190	10 per cent.	England.
Do.....		189,785	do	Germany.
Do.....		89,113	do	France.

A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<i>France.</i>				
Hardware and fancy goods.....		61,572	10 per cent.....	Holland.
Do.....		26,472	do.....	United States.
Do.....		8,765	do.....	Spain.
Do.....		8,389	do.....	Sweden and Norway, Switzerland, Portugal, Austria.
Total.....		593,206		
<i>Hides:</i>				
Tanned.....tons.	150	900,000	150 francs per ton	England.
Do.....do..	16	96,000	do.....	France.
Do.....do..	10	60,000	do.....	Germany.
Do.....do..	9	54,000	do.....	United States, Holland.
Total.....	185	1,110,000		
<i>Raw:</i>				
.....tons.	13,269	17,249,700	Free.....	Argentine Republic.
Do.....do..	5,795	7,533,500	do.....	Brazil.
Do.....do..	4,433	5,762,900	do.....	Uruguay.
Do.....do..	2,137	2,778,100	do.....	England.
Do.....do..	1,598	2,077,400	do.....	France.
Do.....do..	663	861,900	do.....	Holland, Germany, United States, Portugal.
Total.....	27,695	36,263,500		
Honey.....tons.	833	299,700	120 francs per ton	France.
Do.....do..	244	219,600	do.....	Cuba, Porto Rico.
Do.....do..	86	77,400	do.....	United States.
Do.....do..	95	85,500	do.....	Other countries.
Total.....	758	682,200		
Hops.....tons.	50	37,500	Free.....	Germany.
Do.....do..	38	28,500	do.....	England, France, Holland.
Total.....	88	66,000		
Instruments, musical and surgical.....		87,337	Surgical, free; musical, 6 per cent.	Germany.
Do.....		70,859	do.....	France.
Do.....		51,980	do.....	England.
Do.....		8,118	do.....	United States.
Do.....		3,980	do.....	Switzerland, Holland.
Total.....		217,274		
<i>Iron:</i>				
Ore and filings.....tons.	32,675	653,500	Free.....	Spain.
Do.....do..	15,673	313,460	do.....	Algeria, Sweden and Norway.
Total.....	48,348	966,960		
Sheet and bar.....tons.	3,242	907,760	10 francs per ton.	Sweden and Norway.
Do.....do..	670	187,600	do.....	Other countries.
Total.....	3,912	1,095,360		
Cast and scrap.....tons.	25,995	2,859,450	5 francs per ton..	England.
Do.....do..	3,540	389,400	do.....	Sweden and Norway.
Do.....do..	509	55,960	do.....	Other countries.
Total.....	30,044	3,304,840		
Lard and tallow.....tons.	14,150	13,442,500	Free.....	United States.
Do.....do..	4,714	4,478,300	do.....	Argentine Republic.
Do.....do..	1,345	1,277,750	do.....	Uruguay.
Do.....do..	840	893,000	do.....	Holland.
Do.....do..	621	589,950	do.....	England.
Do.....do..	585	555,750	do.....	Other countries.
Total.....	22,335	21,237,250		
Laces.....		19,281	10 per cent.....	England.
Do.....		3,266	do.....	Germany, France, Portugal.
Total.....		22,547		

A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Lead</b> ..... tons.	2, 386	<i>Francs.</i> 1, 517, 800	Free .....	Spain.
Do ..... do..	289	158, 950	do .....	Holland, England.
<b>Total</b> .....	2, 685	1, 476, 750		
<b>Machinery:</b>				
Steel and iron ..... tons.	1, 439	1, 654, 850	Cast iron 20 francs, and steel 40 francs per ton.	England.
Do ..... do..	571	656, 650	do .....	Germany, France, United States, Holland.
<b>Total</b> .....	2, 010	2, 311, 500		
<b>Manufactures:</b>				
Cotton ..... tons	50	360, 000	10 per cent. ....	England.
Do ..... do..	32	192, 000	do .....	Other countries.
<b>Total</b> .....	92	552, 000		
Copper and nickel .....		31, 234	10 per cent. ....	England.
Do .....		25, 041	do .....	France.
Do .....		14, 653	do .....	Germany.
Do .....		8, 437	do .....	Other countries.
<b>Total</b> .....		79, 365		
Gold and silver .....		35, 528	5 per cent. ....	Germany.
Do .....		15, 108	do .....	France.
Do .....		2, 501	do .....	Other countries.
<b>Total</b> .....		53, 137		
Gutta-percha .....		118, 262	10 per cent. ....	England.
Do .....		2, 319	do .....	Germany, United States, France.
<b>Total</b> .....		120, 581		
Iron and steel ..... tons.	495	620, 400	40 francs per ton	England.
Do ..... do..	80	48, 000	do .....	Holland.
Do ..... do..	46	27, 600	do .....	United States.
Do ..... do..	45	80, 200	do .....	Germany.
Do ..... do..	25	24, 800	do .....	France.
Do ..... do..	7	4, 200	do .....	Russia, Sweden, and Norway.
<b>Total</b> .....	698	805, 200		
Wool and linen .....		1, 226, 367	10 per cent. ....	England.
Do .....		148, 382	do .....	France.
Do .....		124, 798	do .....	Germany.
Do .....		51, 833	do .....	Holland.
Do .....		2, 391	do .....	Other countries.
<b>Total</b> .....		1, 553, 771		
Silk ..... tons.	6	480, 000	3,000 francs per ton.	Germany.
Do ..... do..	1	80, 000	do .....	France.
<b>Total</b> .....	7	560, 000		
Pewter, tin, and zinc .....		21, 230	10 per cent. ....	England.
Do .....		10, 050	do .....	France.
Do .....		14, 443	do .....	Germany, Holland, Denmark.
<b>Total</b> .....		45, 723		
Leather .....		64, 696	10 per cent. ....	England.
Do .....		15, 650	do .....	Germany.
Do .....		11, 154	do .....	France.
Do .....		4, 812	do .....	Holland.
Do .....		1, 700	do .....	United States.
Do .....		346	do .....	Other countries.
<b>Total</b> .....		98, 358		

A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Manufactures—Continued.</b>		<i>Francs.</i>		
Wood.....		39,796	10 per cent.....	Germany.
Do.....		29,110	do.....	France.
Do.....		23,084	do.....	England.
Do.....		17,684	do.....	Norway and Sweden.
Do.....		11,408	do.....	United States.
Do.....		11,109	do.....	Holland.
Do.....		1,916	do.....	Other countries.
Total.....		134,125		
Others.....		89,117	10 per cent.....	England.
Do.....		20,047	do.....	Holland.
Do.....		16,796	do.....	Germany.
Do.....		13,727	do.....	Other countries.
Total.....		139,687		
Meat..... tons.	24,977	37,465,500	Free.....	United States.
Do..... do.	3,231	4,846,500	do.....	England.
Do..... do.	631	946,500	do.....	France.
Do..... do.	474	711,000	do.....	Holland.
Do..... do.	128	192,000	do.....	Brazil, Germany, Argentine Republic.
Total.....	29,441	44,161,500		
Metals and minerals, not else- where specified..... tons.	126,180	17,658,200	Free.....	Spain.
Do..... do.	26,676	3,734,640	do.....	Sweden and Norway.
Do..... do.	16,832	2,356,480	do.....	England.
Do..... do.	15,243	2,134,020	do.....	Italy.
Do..... do.	13,210	1,849,400	do.....	Holland.
Do..... do.	10,405	1,456,700	do.....	Other countries.
Total.....	208,496	29,189,440		
Objects of art.....		445,410	Free.....	England.
Do.....		184,754	do.....	Germany.
Do.....		83,519	do.....	France.
Do.....		17,000	do.....	United States.
Do.....		22,285	do.....	Holland, Italy, Switzerland.
Total.....		712,968		
Oil, alimentary..... tons.	99	227,700	Free.....	France.
Do..... do.	78	179,400	do.....	England, Holland, Spain, Italy.
Total.....	177	407,100		
Oils, others..... tons.	8,969	9,885,900	Free.....	England.
Do..... do.	1,769	1,945,900	do.....	Germany.
Do..... do.	995	1,094,500	do.....	Guinea.
Do..... do.	577	634,700	do.....	United States.
Do..... do.	701	771,100	do.....	Other countries.
Total.....	18,011	14,312,100		
Oil cakes..... tons.	1,234	259,140	Free.....	Germany.
Do..... do.	1,430	300,300	do.....	Russia, Holland.
Total.....	2,664	559,440		
Paints and colors..... tons.	5,611	1,963,830	Free.....	Hayti.
Do..... do.	2,421	847,350	do.....	England.
Do..... do.	796	278,600	do.....	France.
Do..... do.	732	256,200	do.....	Germany.
Do..... do.	779	272,650	do.....	Holland.
Do..... do.	1,242	434,700	do.....	Other countries.
Total.....	11,581	4,053,350		
Paper..... tons.	203	243,600	40 francs per ton	Germany.
Do..... do.	124	148,800	do.....	England.
Do..... do.	119	142,800	do.....	Holland, France, Sweden and Norway.
Total.....	446	535,200		

## A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.	
<i>Franks.</i>					
Perfumery .....		8,829	10 per cent. ....	Germany.	
Do .....		6,565	do .....	Holland.	
Do .....		5,923	do .....	France.	
Do .....		4,540	do .....	United States.	
Do .....		6,274	do .....	England, Italy.	
Total .....		32,131			
Petroleum .....	tons	115,487	28,866,750	Free .....	United States.
Do .....	do.	340	85,000	do .....	England.
Total .....		115,807	28,951,750		
Pewter .....	tons	143	400,400	Free .....	United States.
Do .....	do.	168	470,400	do .....	England, Holland.
Total .....		311	870,800		
Porcelains .....		35,855	10 per cent. ....	England.	
Do .....		12,512	do .....	France.	
Do .....		12,852	do .....	Germany.	
Do .....		8,848	do .....	Holland.	
Do .....		660	do .....	Other countries.	
Total .....		67,227			
Pottery .....		47,872	15 francs per ton	Germany.	
Do .....		43,828	do .....	France.	
Do .....		35,914	do .....	Holland.	
Do .....		34,880	do .....	England.	
Total .....		162,294			
Preserves .....	tons	210	546,000	600 francs per ton if in brandy or sugar; 100 francs per ton.	England.
Do .....	do.	164	426,400	do .....	Italy.
Do .....	do.	157	408,200	do .....	Uruguay.
Do .....	do.	150	390,000	do .....	Germany.
Do .....	do.	79	205,400	do .....	France.
Do .....	do.	28	72,800	do .....	United States.
Do .....	do.	47	122,200	do .....	Other countries.
Total .....		835	2,171,000		
Rags .....	tons	857	342,800	Free .....	Germany.
Do .....	do.	295	118,000	do .....	Holland.
Do .....	do.	276	110,400	do .....	England.
Do .....	do.	169	67,600	do .....	France.
Do .....	do.	204	81,600	do .....	Other countries.
Total .....		1,801	720,400		
Resin and bitumen .....	tons	11,149	2,787,250	Free .....	United States.
Do .....	do.	9,808	2,452,000	do .....	England.
Do .....	do.	5,890	1,472,500	do .....	Holland.
Do .....	do.	5,953	1,488,250	do .....	France.
Do .....	do.	980	245,000	do .....	Sweden and Norway, Germany
Total .....		33,780	8,445,000		
Rice .....	tons	30,132	8,436,960	Free .....	India.
Do .....	do.	7,065	1,978,200	do .....	Holland.
Do .....	do.	4,284	1,199,520	do .....	England.
Do .....	do.	1,413	395,640	do .....	Germany, France.
Total .....		42,894	12,010,320		
Salt .....	tons	34,748	2,084,880	Free .....	England.
Do .....	do.	3,268	196,080	do .....	Germany, Portugal, Brazil.
Total .....		38,016	2,280,960		
Seeds:					
Oil .....	tons	46,025	16,108,750	Free .....	Russia.
Do .....	do.	6,195	2,168,250	do .....	India.
Do .....	do.	5,654	1,978,900	do .....	Turkey.

## A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<i>Francs.</i>				
<b>Seeds—Continued.</b>				
Oil.....tons.	5, 149	1, 802, 150	Free .....	Germany.
Do.....do..	3, 146	1, 101, 100	..do .....	England.
Do.....do..	583	204, 050	..do .....	Holland, Austria, United States
Total .....	66, 752	23, 363, 200		
Other.....tons.	1, 443	865, 800	Free .....	Russia.
Do.....do..	1, 016	609, 600	..do .....	England.
Do.....do..	880	528, 000	..do .....	United States.
Do.....do..	2, 004	1, 202, 400	..do .....	Other countries.
Total .....	5, 343	3, 205, 800		
<b>Silk, raw</b> .....tons.	36	2, 520, 000	Free .....	England.
Do.....do..	8	560, 000	..do .....	Germany, France.
Total .....	44	3, 080, 000		
<b>Soap</b> .....tons.	76	76, 000	60 francs per ton.	Holland.
Do.....do..	55	55, 000	..do .....	France.
Do.....do..	42	128, 000	..do .....	England, Germany, Italy.
Total .....	173	257, 000		
<b>Spices</b> .....		178, 463	15 per cent. ....	England.
Do.....		142, 656	..do .....	Holland.
Do.....		84, 608	..do .....	France, Germany, Italy.
Total .....		405, 727		
<b>Steel</b> .....tons.	670	335, 000	10 francs per ton.	England.
Do.....do..	184	67, 000	..do .....	Germany, Sweden and Norway.
Total .....	804	402, 000		
<b>Stones:</b>				
Rough and polished . tons.	2, 428	169, 960	10 per cent. polished, rough free.	Italy.
Do.....do..	795	55, 650	..do .....	England.
Do.....do..	424	29, 680	..do .....	Sweden and Norway.
Do.....do..	411	28, 770	..do .....	Portugal.
Do.....do..	632	44, 170	..do .....	Holland, Denmark, Algeria.
Total .....	4, 690	328, 230		Germany.
<b>Sugar</b> .....tons.	6, 847	4, 587, 490	Free for raw ....	Holland.
Do.....do..	3, 136	2, 101, 120	..do .....	England.
Do.....do..	2, 594	1, 737, 980	..do .....	France.
Do.....do..	2, 026	1, 357, 420	..do .....	Cuba and Porto Rico.
Do.....do..	1, 766	1, 183, 220	..do .....	Germany, Egypt, Austria.
Total .....	16, 369	10, 967, 230		
<b>Sulphur</b> .....tons.	3, 894	778, 800	Free .....	Italy.
Do.....do..	619	123, 800	..do .....	Greece, Holland.
Total .....	4, 513	902, 600		
<b>Sirups and molasses</b> .... tons.	816	228, 480	150 francs per ton	England.
Do.....do..	172	48, 160	..do .....	France, Holland.
Total .....	988	276, 640		
<b>Tan-bark</b> .....tons.	1, 011	202, 200	Free .....	Algeria.
Do.....do..	817	63, 400	..do .....	England.
Do.....do..	213	42, 600	..do .....	Italy.
Do.....do..	200	40, 000	..do .....	Spain.
Do.....do..	56	11, 200	..do .....	Portugal, Turkey, France.
Total .....	1, 797	359, 400		
<b>Tea</b> .....tons.	38	265, 000	900 francs per ton	England.
Do.....do..	8	21, 000	..do .....	Holland.
Total .....	41	287, 000		



## A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
Tin.....tons.	297	France. 227, 600	30 francs per ton.	England.
Tobacco:				
Cigars.....tons.	8	200, 000	2,580 francs per ton.	United States.
Do.....do..	6	150, 000	...do.....	England.
Do.....do..	13	325, 000	...do.....	Holland, France, Germany.
Total.....	27	675, 000		
Not manufactured...tons.	8, 118	13, 800, 600	132 francs per ton	United States.
Do.....do..	1, 580	2, 601, 000	...do.....	England.
Do.....do..	1, 385	2, 289, 500	...do.....	Holland.
Do.....do..	519	882, 300	...do.....	Other countries.
Total.....	11, 502	19, 553, 400		
Manufactured.....tons.	61	122, 000	420 francs per ton	United States.
Do.....do..	16	32, 000	...do.....	England, Holland.
Total.....	77	154, 000		
Vegetables:				
Fresh and dried....tons.	6, 929	450, 385	Free.....	Holland.
Do.....do..	344	22, 360	...do.....	Germany.
Do.....do..	103	6, 695	...do.....	Other countries.
Total.....	7, 376	479, 440		
Vegetable substances.....		309, 189	Free.....	England.
Do.....do..		199, 301	...do.....	Holland.
Do.....do..		139, 325	...do.....	Sweden and Norway.
Do.....do..		85, 231	...do.....	Germany.
Do.....do..		84, 550	...do.....	Algeria.
Do.....do..		163, 100	...do.....	Other countries.
Total.....		980, 696		
Vinegar.....hectoliters.	9, 101	227, 525	60 francs per hectoliter.	Holland.
Do.....do..	1, 564	39, 850	...do.....	Germany.
Do.....do..	570	14, 250	...do.....	Other countries.
Total.....	11, 265	281, 625		
Wine.....hectoliters.	35, 401	3, 540, 100	5 francs per hectoliter, 15 francs in bottles.	France.
Do.....do..	2, 171	217, 100	...do.....	Spain.
Do.....do..	1, 216	121, 600	...do.....	Germany.
Do.....do..	1, 643	164, 200	...do.....	England.
Do.....do..	1, 410	141, 000	...do.....	Other countries.
Total.....	41, 840	4, 184, 000		
Wax.....tons.	54	194, 400	Free.....	Portugal.
Do.....do..	52	187, 200	...do.....	Spain.
Do.....do..	39	140, 400	...do.....	Germany.
Do.....do..	40	144, 000	...do.....	Other countries.
Total.....	185	666, 000		
Wood:				
For building...met. cube.	173, 383	14, 737, 980	1 and 3 francs per metric cube.	Sweden and Norway.
Do.....do..	23, 419	1, 990, 615	...do.....	Russia.
Do.....do..	23, 090	1, 962, 650	...do.....	Germany.
Do.....do..	7, 784	661, 640	...do.....	United States.
Do.....do..	3, 916	332, 860	...do.....	Other countries.
Total.....	231, 507	19, 685, 745		
Cabinet.....tons.	1, 542	589, 700	3 francs per ton.	England.
Do.....do..	438	170, 800	...do.....	Holland.
Do.....do..	386	135, 100	...do.....	France.

## A.—Statement showing the commerce at Antwerp, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
		<i>Francs.</i>		
Wood—Continued.				
Cabinet ..... tons.	212	74, 200	3 francs per ton.	Other countries.
Total .....	2, 628	919, 800		
Not specified .....		90, 751	5 per cent. ....	Holland.
Do .....		28, 032	do .....	United States.
Do .....		14, 990	do .....	Russia.
Do .....		13, 584	do .....	Sweden and Norway.
Do .....		4, 000	do .....	Germany, England, France.
Total .....		151, 357		
Wools ..... tons.	40, 967	129, 046, 050	Free .....	Argentine Republic.
Do ..... do.	17, 325	54, 573, 750	do .....	England.
Do ..... do.	6, 480	20, 412, 000	do .....	Brazil.
Do ..... do.	2, 527	7, 960, 050	do .....	Uruguay.
Do ..... do.	1, 942	6, 117, 300	do .....	France.
Do ..... do.	1, 881	5, 925, 150	do .....	Other countries.
Total .....	71, 122	224, 034, 300		
Yarn:				
Cotton ..... tons.	153	765, 000	100 to 500 francs per ton.	England.
Do ..... do.	12	60, 000	do .....	Holland, Germany.
Total .....	165	825, 000		
Woolen and hair ..... tons.	114	1, 197, 000	200 to 300 francs per ton.	England.
Do ..... do.	14	147, 000	do .....	Germany.
Total .....	128	1, 344, 000		
Hemp, flax, and jute. tons.	146	730, 000	Free .....	England.
Do ..... do.	94	470, 000	do .....	Germany.
Do ..... do.	32	160, 000	do .....	Russia, France, Holland.
Total .....	272	1, 360, 000		
Zinc ..... tons.	50	35, 400	Free .....	Holland.
Do ..... do.	32	19, 200	do .....	England.
Do ..... do.	11	6, 600	do .....	Argentine Republic.
Total .....	102	61, 200		
Total values .....		359, 754, 505		

## B.—Statement showing the commerce of Antwerp for the year 1878.

## SPECIAL EXPORTS.

Articles.	Quantity.	Value.	Whither exported.
		<i>Francs.</i>	
Animals, living:			
Cattle and sheep ..... head.	75, 898	4, 098, 222	England.
Do ..... do.	70	3, 780	Holland.
Total .....	75, 968	4, 102, 002	
Horses ..... head.	1, 246	872, 200	England.
Do ..... do.	7	4, 900	Holland.
Total .....	1, 253	877, 100	
Arms .....		2, 529, 225	England.
Do .....		964, 557	Germany.
Do .....		701, 565	Brazil.
Do .....		473, 043	United States.
Do .....		403, 000	China.
Do .....		284, 950	Argentine Republic.
Do .....		272, 295	France.

## B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
<b>Arms</b> .....		<i>Francs.</i>	
Do .....		239, 007	Portugal.
Do .....		138, 160	Spain.
Do .....		241, 525	Other countries.
<b>Total</b> .....		6, 247, 827	
<b>Beer</b> .....	15	450	Germany.
Do .....	7	210	Other countries.
<b>Total</b> .....	22	660	
<b>Brandy and gin</b> .....	133	4, 921	Cuba.
Do .....	6	222	Sweden and Norway.
Do .....	5	185	Spain.
Do .....	16	592	Other countries.
<b>Total</b> .....	160	5, 920	
<b>Books</b> .....		162, 000	England.
Do .....		78, 000	France.
Do .....		48, 000	United States.
Do .....		54, 000	Other countries.
<b>Total</b> .....		342, 000	
<b>Butter</b> .....	212	614, 800	England.
Do .....	1	2, 900	Other countries.
<b>Total</b> .....	213	617, 700	
<b>Carriages</b> .....		30, 000	Tunis.
Do .....		21, 500	Holland.
Do .....		5, 000	England.
Do .....		1, 750	Other countries.
<b>Total</b> .....		342, 000	
<b>Candles</b> .....	907	2, 492, 500	England.
Do .....	924	2, 335, 000	Germany.
Do .....	440	1, 100, 000	Brazil.
Do .....	302	754, 000	Turkey.
Do .....	252	630, 000	Spain.
Do .....	244	610, 000	Peru.
Do .....	232	580, 000	Chili.
Do .....	180	450, 000	Argentine Republic.
Do .....	618	1, 545, 000	Other countries.
<b>Total</b> .....	4, 199	10, 498, 500	
<b>Chalk</b> .....	308	4, 004	Holland.
Do .....	50	650	England.
Do .....	5	65	Spain.
<b>Total</b> .....	363	4, 719	
<b>Chemicals:</b>			
Soda .....	1, 132	339, 600	England.
Do .....	858	256, 800	Germany.
Do .....	387	118, 100	Russia.
Do .....	634	190, 200	Other countries.
<b>Total</b> .....	3, 009	902, 700	
<b>Not specified</b> .....		570, 863	France.
Do .....		350, 675	England.
Do .....		347, 635	Holland.
Do .....		190, 011	Spain.
Do .....		555, 778	Other countries.
<b>Total</b> .....		2, 014, 962	
<b>Cheese</b> .....	3	4, 500	Argentine Republic.
Do .....	1	1, 500	Holland.
Do .....	1	1, 500	Germany.
<b>Total</b> .....	5	7, 500	

## B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
<b>Clothing</b> .....		<i>Francs.</i>	
Do .....		778, 310	England.
Do .....		241, 699	Argentine Republic.
Do .....		55, 809	Brazil.
Do .....		68, 475	Other countries.
<b>Total</b> .....		1, 144, 093	
<b>Coal</b> .....	tons	24, 515	United States.
Do .....	do.	6, 323	England.
Do .....	do.	5, 605	Chili.
Do .....	do.	5, 507	Spain.
Do .....	do.	3, 850	Italy.
Do .....	do.	18, 516	Other countries.
<b>Total</b> .....		64, 816	
<b>Cocoa</b> .....	tons	37	Germany.
Do .....	do.	1	England, Cuba.
<b>Total</b> .....		38	
<b>Coffee</b> .....	tons	4	Germany.
Do .....	do.	1	England.
<b>Total</b> .....		5	
<b>Copper and nickel:</b>			
Unwrought .....	tons	222	England.
Do .....	do.	213	Germany.
Do .....	do.	3	Holland.
<b>Total</b> .....		438	
Wrought .....	tons	21	Russia.
Do .....	do.	5	Holland.
Do .....	do.	5	England.
Do .....	do.	4	Turkey.
<b>Total</b> .....		35	
<b>Cordage</b> .....	tons	142	Holland.
Do .....	do.	139	Germany.
Do .....	do.	90	Argentine Republic.
Do .....	do.	86	Uruguay.
Do .....	do.	102	Other countries.
<b>Total</b> .....		509	
<b>Drugs</b> .....	tons	480	United States.
Do .....	do.	398	England.
Do .....	do.	296	Russia.
Do .....	do.	202	Germany.
Do .....	do.	190	Other countries.
<b>Total</b> .....		1, 566	
<b>Fish</b> .....	tons	19	Sweden and Norway.
Do .....	do.	12	England.
Do .....	do.	9	Germany.
Do .....	do.	14	Cuba and Porto Rico.
<b>Total</b> .....		54	
<b>Flax and hemp</b> .....	tons	1, 750	Germany.
Do .....	do.	422	England.
Do .....	do.	79	Holland.
Do .....	do.	69	France.
Do .....	do.	28	United States.
Do .....	do.	83	Other countries.
<b>Total</b> .....		2, 431	
<b>Fruits</b> .....	tons	8, 578	England.
Do .....	do.	1	Holland.
Do .....	do.	1	Germany.
<b>Total</b> .....		8, 580	

B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
<b>Glass:</b>		<i>Francs.</i>	
Mirrors and plates .....		573, 177	England.
Do .....		890, 100	United States.
Do .....		218, 070	Russia.
Do .....		186, 278	Germany.
Do .....		126, 487	Holland.
Do .....		98, 840	Spain.
Do .....		95, 680	Other countries.
Total .....		1, 689, 232	
Window .....	tons.. 32, 070	12, 828, 000	England.
Do .....	do.. 9, 440	3, 776, 000	United States.
Do .....	do.. 3, 933	1, 573, 200	Germany.
Do .....	do.. 3, 738	1, 495, 200	Turkey.
Do .....	do.. 3, 357	1, 842, 800	English possessions.
Do .....	do.. 2, 389	955, 600	Holland.
Do .....	do.. 1, 971	788, 400	Sweden and Norway.
Do .....	do.. 1, 965	782, 000	China.
Do .....	do.. 1, 263	505, 200	Denmark.
Do .....	do.. 6, 051	2, 420, 400	Other countries.
Total .....	66, 167	26, 466, 800	
Other .....	tons.. 1, 071	535, 500	England.
Do .....	do.. 412	206, 000	Germany.
Do .....	do.. 97	48, 500	Plata.
Do .....	do.. 72	36, 000	Brasil.
Do .....	do.. 35	17, 500	United States.
Do .....	do.. 411	205, 500	Other countries.
Total .....	2, 098	1, 049, 000	
<b>Grain:</b>			
Wheat, rye, barley .....	tons.. 81, 630	21, 223, 800	Germany.
Do .....	do.. 44, 191	11, 489, 600	Holland.
Do .....	do.. 3, 561	925, 800	France.
Do .....	do.. 537	139, 620	England.
Do .....	do.. 291	75, 600	Spain.
Total .....	130, 210	33, 854, 600	
Other and flour .....	tons.. 7, 275	1, 964, 250	Holland.
Do .....	do.. 7, 022	1, 895, 940	Germany.
Do .....	do.. 4, 513	1, 218, 510	Other countries.
Total .....	18, 810	5, 078, 700	
<b>Hardware and fancy articles</b> .....		271, 935	England.
Do .....		179, 710	Greece.
Do .....		110, 852	Brazil.
Do .....		88, 770	Holland.
Do .....		88, 475	Germany.
Do .....		66, 932	Spain.
Do .....		10, 420	United States.
Do .....		520, 892	Other countries.
Total .....		1, 337, 986	
<b>Hides and skins:</b>			
Untanned .....	tons.. 4, 789	6, 225, 700	England.
Do .....	do.. 1, 844	1, 746, 200	Germany.
Do .....	do.. 628	816, 400	United States.
Do .....	do.. 417	542, 100	Greece.
Do .....	do.. 343	445, 900	Sweden and Norway.
Do .....	do.. 2, 203	2, 863, 900	Other countries.
Total .....	9, 724	12, 640, 200	
Tanned .....	tons.. 61	268, 400	United States.
Do .....	do.. 55	342, 000	England.
Do .....	do.. 28	123, 200	Other countries.
Total .....	144	633, 600	
<b>Hops</b> .....	tons.. 629	471, 750	England.
Do .....	do.. 59	44, 250	Holland.
Do .....	do.. 44	38, 000	Sweden and Norway.
Do .....	do.. 22	16, 500	Brasil.
Total .....	754	566, 500	

## B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.	
<b>Industrial products</b> .....		<i>Francs.</i>		
Do .....		85,750	Portugal.	
Do .....		2,100	Germany.	
<b>Total</b> .....		87,850		
<b>Iron:</b>				
Mineral and filings .....	tons	30,989	433,846	Germany.
Do .....	do.	612	8,568	England.
<b>Total</b> .....		31,601	442,414	
<b>Cast and scrap</b> .....	tons	434	47,740	England.
Do .....	do.	249	27,390	France.
Do .....	do.	60	6,600	Holland.
Do .....	do.	45	4,950	China.
Do .....	do.	2	220	Sweden and Norway.
<b>Total</b> .....		790	86,900	
<b>Wrought</b> .....	tons	21,376	6,412,800	England.
Do .....	do.	14,309	4,292,700	Brazil.
Do .....	do.	14,020	4,206,000	Russia.
Do .....	do.	10,738	3,221,400	Italy.
Do .....	do.	9,426	2,827,800	Germany.
Do .....	do.	7,279	2,183,700	China.
Do .....	do.	3,805	1,141,500	Spain.
Do .....	do.	13,312	3,963,600	Portugal, Turkey, and other countries.
<b>Total</b> .....		94,265	28,279,500	
<b>Laces</b> .....			43,911	England.
Do .....			119	Germany.
<b>Total</b> .....			44,030	
<b>Lard and tallow</b> .....	tons	2,294	2,179,300	Germany.
Do .....	do.	2,110	2,004,500	Holland.
Do .....	do.	2,295	2,180,250	England and other countries.
<b>Total</b> .....		6,699	6,364,050	
<b>Lead</b> .....	tons	4,621	2,541,550	England.
Do .....	do.	951	523,050	Russia.
Do .....	do.	183	89,650	Germany and other countries.
<b>Total</b> .....		5,735	3,154,250	
<b>Machinery:</b>				
Cast-iron .....	tons	2,309	2,842,800	Spain.
Do .....	do.	2,040	2,448,000	Russia.
Do .....	do.	1,797	2,156,400	Portugal.
Do .....	do.	1,758	909,600	Germany.
Do .....	do.	1,418	1,701,600	Other countries.
<b>Total</b> .....		8,382	10,058,400	
<b>Steel and iron</b> .....	tons	4,725	7,087,500	Russia.
Do .....	do.	2,857	4,285,500	Spain.
Do .....	do.	1,414	2,121,000	Other countries.
<b>Total</b> .....		8,996	13,494,000	
<b>Manufactures of copper</b> .....			17,960	England.
Do .....			8,920	Brazil.
Do .....			8,480	Holland.
Do .....			12,090	France, Germany and other countries.
<b>Total</b> .....			47,450	
<b>Manufactures of iron</b> .....	tons	4,409	1,322,700	England.
Do .....	do.	2,509	752,700	Spain.
Do .....	do.	1,884	565,200	Germany.
Do .....	do.	7,299	2,189,700	Holland, Cuba, and other countries.
<b>Total</b> .....		16,101	4,830,300	

B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
		<i>France.</i>	
Manufactures of cast-iron..... tons..	543	182,900	Spain.
Do..... do.....	134	40,200	France.
Do..... do.....	189	56,700	Russia, Brazil, and other countries.
Total.....	866	259,800	
Manufactures of steel..... tons..	189	378,000	England.
Do..... do.....	178	356,000	Spain.
Do..... do.....	99	198,000	Russia and other countries.
Total.....	466	932,000	
Manufactures of zinc.....		80,387	England.
Do.....		17,765	Sweden and Norway.
Do.....		10,760	Italy.
Do.....		21,440	Brazil and other countries.
Total.....		130,632	
Manufactures of wood.....		1,087,314	England.
Do.....		230,418	Holland.
Do.....		310,830	Brazil.
Do.....		283,116	Spain and other countries.
Total.....		1,921,678	
Manufactures of cotton..... tons..	433	2,273,250	Chili.
Do..... do.....	417	2,085,000	Brazil.
Do..... do.....	372	1,860,000	Germany.
Do..... do.....	1,238	6,190,000	France, Argentine Republic, and other countries.
Total.....	2,460	12,408,250	
Manufactures of linen, hemp, jute..... tons..	114	706,800	England.
Do..... do.....	84	520,800	France.
Do..... do.....	253	1,568,600	Holland and other countries.
Total.....	451	2,796,200	
Manufactures of wool..... tons..	529	7,935,000	England.
Do..... do.....	272	4,080,000	Chili.
Do..... do.....	243	3,645,000	Germany.
Do..... do.....	429	6,435,000	Brazil and other countries.
Total.....	1,473	22,095,000	
Manufactures of all other textiles.....		703,381	Germany.
Do.....		283,922	Argentine Republic.
Do.....		197,490	Holland.
Do.....		185,890	Brazil.
Do.....		321,650	England, France, and other countries.
Total.....		1,692,333	
Manures..... tons..	12,599	2,519,800	Holland.
Do..... do.....	3,886	777,200	Germany.
Do..... do.....	209	41,800	Other countries.
Total.....	16,694	3,338,800	
Meat..... tons..	1,098	1,647,000	Germany.
Do..... do.....	608	912,000	Holland.
Do..... do.....	1,175	1,762,500	Sweden and Norway and other countries.
Total.....	2,881	4,321,500	
Metals, ores, not elsewhere specified..... tons..	17,516	700,640	Germany.
Do..... do.....	5,265	210,600	England.
Do..... do.....	4,213	168,520	Holland.
Do..... do.....	4,056	162,240	France, Spain, United States, and other countries.
Total.....	31,050	1,242,000	
Musical instruments.....		41,200	England.
Do.....		22,300	Chili.
Do.....		11,975	Argentine Republic, France, and Holland.
Total.....		75,475	

B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
<b>Objects of art</b> .....		<i>France.</i>	
Do .....		369,215	England.
Do .....		86,785	United States.
Do .....		54,475	France and other countries.
Total .....		510,425	
<b>Oils</b> .....	tons	894	Germany.
Do .....	do.	486	England.
Do .....	do.	361	Switzerland, Spain, and other countries.
Total .....	1,731	2,077,200	
<b>Paper-hangings and others</b> .....	tons	5,384	England.
Do .....	do.	1,760	Spain.
Do .....	do.	1,405	Brazil.
Do .....	do.	4,459	Germany, Holland.
Total .....	12,998	19,497,000	
<b>Pewter, unwrought</b> .....	tons	23	United States.
Do .....	do.	12	Switzerland.
Do .....	do.	16	Sweden and Norway and other countries.
Total .....	51	142,800	
<b>Pottery:</b>			
Bricks .....	pieces	34,029,320	Holland.
Do .....	do.	5,682,440	Germany.
Do .....	do.	3,109,356	Other countries.
Total .....	42,820,116	942,018	
<b>Common</b> .....	tons	17	England.
Do .....	do.	7	Spain.
Total .....	24	3,600	
<b>Faience and porcelain</b> .....	tons	42	Chili.
Do .....	do.	31	Germany.
Do .....	do.	12	United States.
Do .....	do.	24	Brazil and other countries.
Total .....	109	146,500	
<b>Powder</b> .....	tons	361	France.
Do .....	do.	3	Brazil.
Do .....	do.	1	Germany.
Total .....	365	912,500	
<b>Preserves</b> .....	tons	386	England.
Do .....	do.	137	Germany.
Do .....	do.	35	United States.
Do .....	do.	76	Switzerland and other countries.
Total .....	634	1,521,600	
<b>Rags</b> .....	tons	2,177	United States.
Do .....	do.	1,395	England.
Do .....	do.	90	France and other countries.
Total .....	3,662	1,098,600	
<b>Resins and bitumen</b> .....	tons	8,587	Germany.
Do .....	do.	3,046	Holland.
Do .....	do.	1,524	Other countries.
Total .....	13,157	3,289,250	
<b>Rice</b> .....	tons	3,679	Cuba and Porto Rico.
Do .....	do.	412	Germany.
Do .....	do.	319	Chili.
Do .....	do.	769	Holland and other countries.
Total .....	5,179	2,589,500	



B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
			<i>France.</i>
Seeds, oil and other.....tons	3, 521	1, 232, 350	Holland.
Do.....do	2, 660	946, 000	Germany.
Do.....do	1, 031	431, 500	England and other countries.
Total .....	7, 212	2, 609, 850	
			<i>Peru.</i>
Soap.....tons	20	60, 000	England.
Do.....do	10	30, 000	Germany, France, and other countries.
Do.....do	21	83, 000	
Total .....	51	173, 000	
			<i>France.</i>
Stone:			
Rough and dressed.....tons	49, 580	3, 470, 600	Holland.
Do.....do	2, 088	146, 160	France.
Do.....do	1, 640	114, 800	England and other countries
Total .....	53, 808	3, 731, 560	
			<i>England.</i>
Polished and sculptured .....		1, 283, 130	Spain.
Do.....do		30, 368	United States.
Do.....do		26, 850	Other countries.
Do.....do		28, 315	
Total .....		1, 368, 663	
			<i>England.</i>
Steel, unwrought.....tons	6, 640	2, 656, 000	Russia.
Do.....do	3, 430	1, 372, 000	Germany, United States, and other countries.
Do.....do	1, 480	512, 000	
Total .....	11, 550	4, 540, 000	
			<i>England.</i>
Sugar.....tons	23, 055	12, 219, 150	Sweden and Norway.
Do.....do	1, 865	988, 450	United States.
Do.....do	1, 043	562, 790	Other countries.
Do.....do	3, 481	1, 844, 930	
Total .....	29, 444	15, 605, 320	
			<i>Germany.</i>
Sulphur.....tons	2, 376	475, 200	France.
Do.....do	714	142, 800	England and other countries.
Do.....do	827	165, 400	
Total .....	3, 917	783, 400	
			<i>England.</i>
Tan-bark.....tons	1, 491	298, 200	Holland.
Do.....do	148	29, 600	Germany.
Do.....do	11	2, 200	
Total .....	1, 650	330, 000	
			<i>England.</i>
Thread and yarn:			
Cotton.....tons	15	48, 000	Peru.
Do.....do	6	19, 200	Germany and other countries.
Do.....do	4	12, 800	
Total .....	25	68, 000	
			<i>England.</i>
Linen.....tons	489	2, 445, 000	Holland.
Do.....do	244	1, 320, 000	Spain.
Do.....do	134	670, 000	Turkey and other countries.
Do.....do	198	990, 000	
Total .....	1, 065	5, 325, 000	
			<i>England.</i>
Woolen.....tons	3, 686	40, 546, 000	Chili.
Do.....do	85	935, 000	Other countries.
Do.....do	54	594, 000	
Total .....	3, 825	42, 075, 000	
			<i>Switzerland.</i>
Tobacco:			
Leaf.....tons	42	71, 400	England and other countries.
Do.....do	18	30, 600	
Total .....	60	102, 000	

## B.—Statement showing the commerce of Antwerp for the year 1878—Continued.

## SPECIAL EXPORTS—Continued.

Articles.	Quantity.	Value.	Whither exported.
<b>Tobacco—Continued.</b>		<i>Francs.</i>	
Manufactures of ..... tons..	48	240,000	England.
Do ..... do.....	42	210,000	France.
Do ..... do.....	23	115,000	Portugal.
Do ..... do.....	21	105,000	Switzerland, Chili, Brazil, and other countries.
Total .....	134	670,000	
<b>Vegetables, potatoes .....</b> tons..	14,686	1,414,980	England.
Do ..... do.....	68	6,620	Holland and other countries.
Total .....	14,754	1,421,600	
<b>Wax .....</b> tons..	2	7,200	Portugal.
Do ..... do.....	2	7,200	Germany and other countries.
Total .....	4	14,400	
<b>Wood .....</b> tons..	298	31,945	Holland.
Do ..... do.....	161	14,945	Italy, France, and other countries.
Total .....	459	46,890	
<b>Zinc, unwrought .....</b> tons..	13,201	8,580,850	England.
Do ..... do.....	535	347,750	France.
Do ..... do.....	429	278,850	Italy.
Do ..... do.....	308	200,200	United States.
Do ..... do.....	1,422	924,300	Sweden and Norway, Argentine Republic, and other countries.
Total .....	15,895	10,331,750	
<b>Miscellaneous .....</b>		6,778,279	
Total special exports for the year 1878 .....		375,213,000	

## C.—Statement showing the commerce in transit by the port of Antwerp for the year ending December 31, 1878.

Articles.	Direct transit.		Indirect transit.		Total transit.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
<b>Animal matter .....</b>		<i>Francs.</i>		<i>Francs.</i>		<i>Francs.</i>
Arms .....		244,020		2,583,773		2,827,793
Beer .....	1,052	40,417			1,052	40,417
Butter .....	2	26,300			2	26,300
Books .....	14	5,800			14	5,800
Brandy and gin .....	1,173	91,000			1,173	91,000
Candles .....	8	72,664	11,654	722,548	12,828	795,212
Cheese .....	50	22,000			50	22,000
Chemicals .....		75,000				75,000
Clothing .....		126,948				126,948
Coal .....	12,440	345,378			12,440	345,378
Cocoa .....	122	186,600			122	186,600
Coffee .....	122	427,000	17	50,500	139	477,500
Copper: .....	2,877	7,192,000	13,434	38,585,000	16,311	45,777,000
Unwrought .....	11	22,200			11	22,200
Bar, sheet .....	50	130,000	1	2,600	51	132,600
Cordage .....	20	28,000			20	28,000
Cotton .....	35	56,000	1,070	1,712,000	1,105	1,768,000
Drugs .....	154	261,800			154	261,800
Flax and hemp .....	78	101,400			78	101,400
Flour and biscuits .....	60	36,000			60	36,000
Fruits .....	2,063	1,518,960	1,229	836,482	3,292	2,355,442
<b>Glass: .....</b>						
Mirrors .....		353,650				353,650
Window, bottle .....	1,014	163,240		800	1,014	163,040
Grain, barley .....	1,176	294,000			1,176	294,000
Guano and other manures .....			16,694	3,338,800	16,694	3,338,800
Gutta-percha, crude .....	30	105,000	8	28,000	38	133,000
Hardware and fancy articles .....		8,214,814		10,942		8,225,756

C.—Statement showing the commerce in transit by the port of Antwerp, &amp;c.—Continued.

Articles.	Direct transit.		Indirect transit.		Total transit.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		<i>Francs.</i>		<i>Francs.</i>		<i>Francs.</i>
Hides and skins:						
Raw.....tons..	80	104, 000	9, 724	1, 264, 120	9, 804	1, 368, 120
Tanned and prepared.....do..	1, 626	9, 756, 000	1	6, 000	1, 627	9, 762, 000
Honey.....do.....	115	103, 500	65	58, 500	180	162, 000
Hops.....do.....	262	196, 500			262	196, 500
Instruments, surgical.....do.....		345, 378				345, 378
Iron:						
Cast and scrap.....tons..	21, 421	2, 856, 310	1, 241	136, 510	22, 662	2, 992, 820
Bar, sheet, and wire.....do..	5, 259	2, 892, 450	1, 403	771, 650	6, 662	3, 664, 100
Jewelry.....do.....		62, 554				62, 554
Laces.....do.....		25, 578		249		25, 827
Lard and tallow.....tons..	97	92, 150			97	92, 150
Lead.....do.....	4	2, 200			4	2, 200
Machinery:						
Iron, steel, and copper.....tons..	4, 290	4, 933, 506	3, 022	3, 475, 300	7, 312	8, 408, 806
Wood.....do.....		242, 147				242, 147
Manufactures of—		79, 514				79, 514
Copper.....tons.....						
Iron.....do.....	3, 412	2, 047, 200	74	44, 400	3, 486	2, 091, 600
Pewter.....do.....		43, 831				43, 831
Steel.....tons.....	415	830, 000			415	830, 415
Tin.....do.....		14, 144				14, 144
Zinc.....do.....		8, 800				8, 800
Gutta-percha.....do.....		150, 949				150, 949
Leather.....do.....		836, 359				836, 359
Wood.....do.....		648, 055				648, 055
Cotton.....tons.....	3, 077	12, 462, 000	10	60, 000	2, 087	12, 522, 000
Linen.....do.....	1, 018	10, 180, 000		663, 094		10, 843, 094
Silk.....do.....	8	210, 000			8	210, 000
Woolen.....do.....		9, 309, 850				9, 309, 850
Manufactures not elsewhere specified.....do.....		39, 787				39, 787
Meat.....tons.....	61	91, 500			61	91, 500
Metals not elsewhere specified.....do..	29	4, 060			29	4, 060
Objects of art.....do.....		113, 607				113, 607
Oils.....tons.....	163	179, 300	85	93, 590	248	272, 890
Paints and colors, including dye-wood, tons.....	374	110, 900	3, 798	1, 327, 550	4, 167	1, 438, 450
Paper-hanging.....tons.....	986	2, 465, 000	333	832, 500	1, 319	3, 297, 500
Perfumery.....do.....		76, 201				76, 201
Petroleum.....do.....			9, 838	2, 459, 500	9, 838	2, 459, 500
Pewter.....tons.....	18	50, 400			18	50, 400
Pottery.....do.....						
Common.....tons.....	132	19, 800			132	19, 800
Faience and porcelains.....do.....	543	1, 086, 000			543	1, 086, 000
Preserved meats and fruits.....do..	117	304, 200	18	46, 800	135	351, 000
Rags.....do.....	26	10, 400			26	10, 400
Rosin.....do.....	53	11, 750	3, 319	829, 750	3, 372	841, 500
Rice.....do.....	93	83, 700			93	83, 700
Seeds, oil and other.....do.....	10	5, 000	6, 641	3, 320, 500	6, 651	3, 325, 500
Silk.....do.....	26	1, 820, 000			26	1, 820, 000
Soap.....do.....	71	213, 000	1	3, 000	72	216, 000
Spices.....do.....		191, 770		7, 502		199, 272
Steel.....tons.....	1, 191	595, 500			1, 191	595, 500
Stones.....do.....		27, 376				27, 376
Sugar.....do.....	3, 014	2, 019, 380				2, 019, 380
Sulphur.....do.....			3, 917	248, 570	3, 985	2, 267, 950
Sirups of molasses.....tons.....	2, 239	626, 820		783, 400	3, 917	783, 400
Tea.....do.....	18	126, 000	5	1, 980	2, 246	628, 880
Tin.....do.....	214	201, 200	1	35, 000	23	161, 000
Tobacco:						
Leaf.....tons.....	261	443, 700	809	1, 375, 300	1, 070	1, 819, 000
Cigars and other manufactures.....do..	22	550, 000	62	1, 550, 000	84	2, 100, 000
Vegetable substances.....do.....		28, 688				28, 688
Wax.....tons.....	16	57, 600			16	57, 600
Wines.....hectoliters.....	33, 105	3, 310, 500	3, 495	849, 500	36, 600	3, 660, 000
Wood:						
Cabinet-making.....tons.....	127	430, 500	419	146, 650	546	201, 100
Building timber.....cubic meters.....	35, 356	3, 535, 600	45, 699	4, 569, 900	81, 055	8, 105, 500
Wools.....tons.....	123	430, 500	6, 238	2, 183, 300	6, 361	2, 013, 800
Yarn and thread:						
Cotton.....tons.....	7, 972	39, 860, 000			7, 972	39, 860, 000
Linen.....do.....	60	800, 000			60	800, 000
Woolen.....do.....	89	934, 500			89	934, 500
Zinc.....do.....	24	14, 400			24	14, 400
Total.....		132, 560, 339		69, 530, 378		202, 090, 717

D.—Statement showing the navigation at the port of Antwerp for the year ending December 31, 1879.

From—	ENTERED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Africa, north coast	18	17,902	12	3,246	30	21,148
Africa, west coast			6	1,173	6	1,173
Argentine Republic			73	27,838	73	27,838
Australia			2	1,110	2	1,110
Austria	4	3,826			4	3,826
Brazil			23	4,213	23	4,213
Brazil and other places	95	166,343	(*)	(*)	95	166,343
Chili			1	431	1	431
Cuba			6	1,862	6	1,862
Denmark	3	1,842	48	5,455	51	7,297
England	1,155	683,581	178	28,265	1,333	713,846
France	185	104,506	30	9,794	195	114,300
Germany	301	257,798	109	23,769	410	281,567
Greece	20	22,427	2	519	22	22,946
Haiti	1	872	28	7,085	29	7,957
Holland	530	111,994	8	3,201	538	115,195
Holland provinces			1	165	1	165
India	11	18,425	16	12,489	27	30,914
Italy	45	43,019	16	3,898	61	46,917
Japan			1	576	1	576
Mexico			4	930	4	930
Oceania	1	1,944	11	6,063	12	8,007
Peru			47	54,135	47	54,135
Portugal	19	13,354	4	664	23	14,008
Russia	318	380,726	129	41,627	447	422,353
Spain	98	62,916	139	20,769	237	83,685
Sweden and Norway	131	71,792	191	52,896	322	124,688
Turkey	34	45,321			34	45,321
United States, Atlantic coast	84	154,231	370	281,229	454	435,460
United States, Pacific coast			3	2,761	3	2,761
Uruguay			19	5,579	19	5,579
Upper Scheldt	10	2,790	57	8,037	67	10,827
Vessels in distress	1	896	4	813	5	1,709
Vessels launched	1	809			1	809
Total	3,045	2,169,374	1,538	610,582	4,583	2,779,956

To—	CLEARED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Africa, north coast	3	2,630	24	9,399	27	12,029
Africa, west coast			1	548	1	548
Argentine Republic			13	3,457	13	3,457
Austria			5	1,135	5	1,135
Brazil			46	22,547	46	22,547
Brazil and other places	61	101,947	(*)	(*)	61	101,947
Chili	12	15,604	4	2,468	16	18,072
Cbina			10	6,775	10	6,775
Cuba	2	2,611	49	16,629	51	19,240
Denmark	13	11,029	15	3,509	28	14,538
England	1,720	1,344,120	444	135,154	2,164	1,479,274
France	107	69,556	16	2,501	123	72,057
Germany	155	120,364	83	16,500	238	136,864
Greece			1	1,045	1	1,045
Guatemala			1	395	1	395
Haiti			1	555	1	555
Holland	512	110,258	7	1,825	519	112,083
Italy	14	18,066	5	1,472	19	19,538
Japan			6	3,546	6	3,546
Mexico			7	1,340	7	1,340
Oceania	1	1,733	10	5,679	11	7,412
Peru			6	4,085	6	4,085
Portugal	38	25,494	6	1,077	44	26,571
Russia	123	110,698	76	24,762	199	125,460

\* Regular line of steamers.

## D.—Statement showing the navigation at the port of Antwerp, &amp;c.—Continued.

To—	CLEARED—Continued.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Spain .....	98	60, 214	32	5, 510	130	65, 724
Sweden and Norway .....	83	44, 236	211	64, 717	294	108, 953
Turkey .....	9	10, 734	4	542	13	11, 276
United States, Atlantic coast .....	52	101, 057	275	224, 013	327	325, 070
Uruguay .....			3	306	3	966
West Indies .....			8	2, 226	8	2, 226
Upper Scheldt .....	31	7, 382	34	4, 217	65	11, 599
Vessels, destination unknown .....	4	4, 696	91	23, 057	95	27, 753
Total .....	3, 038	2, 162, 129	1, 496	581, 841	4, 534	2, 743, 970

## E.—Statement showing the value of declared exports from the consular district of Antwerp to the United States during the years 1878 and 1877.

Articles.	1878.	1877.	1878 compared with 1877.	
			Increase.	Decrease.
Barrels, empty petroleum .....	\$175, 851 09	\$172, 292 95	\$3, 558 14	
Books .....	2, 547 16	2, 630 30		\$83 14
Bows and arrows .....	255 05		255 05	
Brandy and gin .....	285 65		285 65	
Brimstone .....	2, 462 42	2, 206 86	255 56	
China clay .....		665 30		665 30
Church vestments .....		401 44		401 44
Glass:				
Plate .....		3, 528 91		3, 528 91
Window .....	7, 329 48	12, 256 81		4, 927 33
Glass-sand .....	525 00		525 00	
Glycerine .....	6, 288 23		6, 288 23	
Hides and skins .....	122, 929 72	244, 796 09		121, 866 37
Linen, manufactures of .....		5, 431 46		5, 431 46
Meat, extract of .....	58, 466 56	22, 418 88	36, 047 68	
Paintings .....	13, 004 91	11, 748 56	1, 256 35	
Paints and colors .....	298 44		298 44	
Paper .....	16, 706 93	13, 058 55	3, 708 88	
Rags .....	1, 057 13	11, 702 11		10, 644 98
Roans, salted .....	46, 449 67	33, 326 47	13, 123 20	
Spiegeleisen .....	121, 007 52	236, 247 83		115, 240 31
Sugar .....	104, 860 38	105, 997 10		1, 136 72
Sulphur .....		628 63		628 63
Textile fabrics, not elsewhere specified .....	11, 824 95	1, 434 58	10, 390 37	
Willows .....		1, 447 50		1, 447 50
Wines and liquors .....	1, 461 92	2, 470 46		1, 008 54
Wool .....		16, 253 98		16, 253 98
Zinc .....	6, 369 02	23, 965 84		17, 596 82
Miscellaneous .....	12, 893 00	15, 385 01		2, 492 61
Total .....	712, 934 23	940, 284 22	76, 322 34	303, 672 33
Decrease .....	227, 949 99			

## F.—Navigation of American vessels at the port of Antwerp during the year 1878.

## ENTERED.

Number of vessels.	Tonnage.	Whence.	Number of vessels.	Cargoes inward.	
				Articles.	Value.
6	5,480	Baltimore .....	6	Petroleum .....	\$279,631
2	1,066	Boston .....	1	General cargo .....	51,000
5	5,635	Philadelphia .....	1	Wheat .....	39,520
3	1,645	New Orleans .....	5	Petroleum .....	283,183
			2	Cotton .....	370,540
			1	Wheat .....	39,000
8	5,756	New York .....	5	Petroleum, naphtha .....	218,336
			2	Wheat .....	96,282
1	1,043	Portland .....	1	Lard, tobacco .....	73,187
14	22,472	Peru .....	1	Wheat .....	89,520
1	551	Chili .....	14	Guano .....	1,989,000
1	566	Buenos Ayres .....	1	Wool and hides .....	113,380
2	974	Dantzic .....	2	Wood .....	107,458
1	214	Africa .....	1	Palm oil .....	40,000

Vessels entered, 44, viz, 22 ships, 18 barks, 4 schooners. Aggregate tonnage entered, 45,352 tons. Estimated value of cargoes inward, \$3,790,037.

## CLEARED.

Number of vessels.	Tonnage.	Whither.	Number of vessels.	Cargoes outward.	
				Articles.	Value.
2	2,307	Baltimore .....	2	Ballast .....	.....
3	2,890	Philadelphia .....	2	do .....	.....
2	1,506	New Orleans .....	1	Empty barrels .....	\$2,000
12	12,908	New York .....	2	Ballast .....	.....
			4	Empty barrels .....	20,675
10	10,299	United States .....	8	Ballast .....	.....
6	6,897	Brazil .....	10	do .....	.....
3	4,306	Cardiff .....	6	General cargo .....	234,000
2	979	Cape Breton .....	3	Ballast .....	.....
1	1,803	Saint John .....	1	General cargo .....	27,000
1	521	Sydney .....	1	Ballast .....	.....
1	214	Sold .....	1	do .....	.....
			1	General cargo .....	27,00
			1	Sold .....	.....

Vessels cleared, 43, viz, 22 ships, 17 barks, 4 schooners. Aggregate tonnage cleared, 44,630 tons. Estimated value of cargoes outward, \$310,675.

## G.—Statement showing the quantities and values of direct general imports from the United States into Belgium for the year 1878.

Articles.	1878.		Comparison with the year 1877.	
	Quantity.	Value.	Increase.	Decrease.
Animals:		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Oxen and cows .....	number 344	11,800	11,800	.....
Sheep .....	do 1,086	58,644	58,644	.....
Hogs .....	do 809	40,450	40,450	.....
Animal substances .....	.....	659,093	244,236	.....
Arms .....	.....	24,599	24,599	.....
Books .....	.....	5,009	1,133	.....
Butter .....	kilograms 10,052	29,151	.....	108,1
Candles, tallow and other .....	.....	835	835	.....
Carriages .....	.....	900	900	.....

G.—Statement showing the quantities and values of direct general imports, &amp;c.—Continued.

Articles.	1878.		Comparison with the year 1877.	
	Quantity.	Value.	Increase.	Decrease.
		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Chemicals .....		97,090	940	
Cocoa, crude .....				36,824
Coffee .....	kilograms.	1,793,822	3,139,189	778,479
Copper:				
Unwrought .....	do.	19,550	43,010	43,010
Wrought .....	do.	3,653	9,448	9,448
Cotton .....	do.	5,496,033	8,793,653	5,132,518
Drugs .....	do.	29,876	50,789	35,116
Fish, not elsewhere specified .....	do.	850	297	297
Flour of all kinds .....	do.	3,612,725	1,930,372	1,127,107
Fruits, dried .....	do.	14,969		60,957
Glass, plate .....	do.	10,000	10,000	
Grains:				
Barley .....	kilograms	4,736,057	1,089,294	974,146
Corn and oats .....	do.	34,011,737	6,802,347	4,491,268
Rye .....	do.	19,467,206	3,893,441	2,041,324
Wheat .....	do.	188,273,897	54,990,430	31,673,442
Hardware and fancy articles .....		74,648	39,113	
Hides and skins:				
Tanned and prepared .....	kilograms.	406,450	2,438,700	72,450
Untanned .....	do.	60,848	79,102	329,506
Honey .....	do.	85,662	77,096	453
Hops .....	do.			5,268
Horses .....	number.	64	51,200	51,200
Iron:				
Cast and scrap .....	kilograms.	52,750	5,803	5,803
Manufactures of .....	do.	115,168	58,031	53,031
Lard and tallow .....	do.	14,224,837	13,513,595	1,414,356
Machinery, cast iron and steel .....	do.	181,385	201,056	22,662
Manures .....	do.	5,100	1,020	1,020
Meat .....	do.	25,007,136	37,510,705	16,912,737
Metals, minerals, and clay, not elsewhere spec'd .....	do.	7,107,750	995,048	178,622
Musical instruments .....	do.		4,118	4,118
Objects of art .....	do.	20,000		92,000
Oils .....	kilograms.	612,227	673,534	453,173
Oysters .....	do.	45,774	91,548	80,490
Paints, colors, and dyewoods .....	do.	50,392	17,637	44,265
Petroleum .....	do.	115,467,152	28,866,788	9,177,255
Preserves .....	do.	32,956	79,095	147,046
Resin and bitumen .....	do.	11,148,510	2,787,128	527,786
Rice .....	do.	5,110	4,599	4,599
Seeds, oil and other .....	do.	904,420	536,559	374,096
Starch .....	do.	240,865	154,154	57,293
Stone, slate .....	do.			15,869
Textile fabrics:				
Cotton, muslin .....	kilograms	17,633	111,861	70,927
Woolens and others .....	do.		1,280	30,400
Tobacco:				
Leaf .....	kilograms.	8,170,303	13,889,515	6,777,474
Cigars .....	do.	8,725	218,125	9,800
Other manufactures .....	do.	61,469	122,938	70,962
Vegetable filaments, flax and hemp .....	do.		3,550	3,550
Wax .....	do.			51,019
Wood:				
Building timber .....	cubic meters.	9,210	846,905	280,420
Cabinet making .....	kilograms.		56,278	67,093
Other manufactures .....	do.			18,783
Wool .....	kilograms.	327,958	1,033,068	485,778
Miscellaneous .....	do.		223,896	130,237
Total for the year 1878 in francs .....		186,430,000	71,715,564	13,255,914
Total in United States currency .....		\$35,980,990	\$13,841,104	\$2,558,391
Total for the year 1877 in francs .....		127,970,350		
Total in United States currency .....		\$24,696,278		
Increase in francs .....		58,459,650		
Increase in United States currency .....		\$11,282,712		

H.—Statement showing the quantities and values of direct general exports from the Kingdom of Belgium to the United States for the year 1878.

Articles.	1878.		Comparison with the year 1877.	
	Quantity.	Value.	Increase.	Decrease.
		<i>France.</i>	<i>France.</i>	<i>France.</i>
Animal substances .....		112, 000		183, 500
Arms .....		473, 375	79, 925	
Books .....		55, 000	40, 520	
Brandy and gin .....	hectoliters 667	78, 000		47, 768
Cheese .....	kilograms 38, 550	57, 825	29, 295	
Chemicals .....		67, 213	29, 685	
Clothing .....		165, 333		155, 036
Coal .....	kilograms 25, 063, 000	363, 850	118, 030	
Cocoa .....	do. 281	646		646
Coffee .....	do. 14, 562	25, 688	17, 849	
Copper and nickel, manufactured .....				118, 220
Cordages .....	kilograms 2, 015	2, 821	2, 821	
Drugs .....	do. 557, 800	659, 975	565, 243	
Fish, herrings .....				9, 435
Flax .....	kilograms 27, 559	62, 008	9, 419	
Fruits, prunes .....	do. 43, 684	61, 158		39, 586
Glaes:				
Plate and mirrors .....		1, 380, 629		2, 708, 096
Window .....	kilograms 9, 449, 774	3, 779, 910		649, 082
Other .....	do. 33, 075	84, 880	10, 636	
Gloves, kid .....		357, 207		20, 029
Grain:				
Oats and corn .....	kilograms 4, 850	970	970	
Pearl barley and oatmeal .....	do. 1, 710	855	855	
Hardware and fancy articles .....		277, 740	189, 470	
Hides and skins:				
Untanned .....	kilograms 628, 221	816, 687		463, 976
Tanned and prepared .....	do. 63, 046	280, 807	79, 310	
Hops .....	do. 1, 536	1, 000	1, 000	
Iron:				
Cast and scrap .....	do. 13, 044, 925	1, 434, 942		145, 628
Wrought .....	do. 143, 247	40, 110		325, 917
Manufactures of .....		25, 120		72, 969
Jewelry .....		8, 360		8, 360
Laces .....		153, 160	153, 160	
Lard and tallow .....	kilograms 29, 750	28, 000		18, 904
Lead .....				82, 500
Machinery, iron and steel .....	kilograms 11, 369	37, 053		72, 654
Meat .....	do. 302	453		19, 714
Metals, ores, not elsewhere specified .....	do. 530, 353	21, 331	10, 858	
Musical instruments .....				15, 060
Objects of art .....		142, 535	90, 185	
Paints, colors, dyewoods .....				163, 225
Paper hangings and other .....	kilograms 79, 868	114, 047		6, 918
Pewter .....	do. 38, 555	107, 954	62, 060	
Pottery:				
Common .....	do. 171, 556	25, 733	24, 171	
Faience .....	do. 12, 129	12, 321		11, 340
Preserves .....	do. 35, 137	84, 448	41, 572	
Rags .....	do. 2, 277, 463	693, 278		451, 255
Stones:				
Rough and dressed .....	do. 126, 106	8, 827		3, 485
Polished and sculptured .....		27, 050	14, 650	
Steel:				
Unwrought .....	kilograms 36, 000	14, 400		600
Manufactured .....	kilograms 1, 299, 604	723, 000	236, 976	15, 000
Sugar .....				12, 851
Sulphur .....				8, 358
Tea .....				
Textile fabrics:				
Cotton .....	kilograms 20, 905	147, 263		24, 408
Linen .....		24, 280		9, 117
Silk .....	kilograms 799	61, 000		71, 560
Woolen .....	do. 75, 978	1, 298, 065		75, 435
Other .....				85, 537
Thread, woolen .....	kilograms 3, 634	39, 974	39, 974	
Tobacco, cigars and other manufactures .....	do. 4, 519	52, 232	44, 414	
Wines .....				294, 616
Wood:				
Building timber .....	cubic meters 330	28, 050	28, 050	
Manufactures of .....	kilograms	222, 922		7, 277



H.—Statement showing the quantities and values of direct general exports, &amp;c.—Continued.

Articles.	1878.		Comparison with the year 1877.	
	Quantity.	Value.	Increase.	Decrease.
		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
Wool .....				515,765
Zinc, unwrought .....	kilograms. 307,774	200,053		85,848
Miscellaneous .....		1,064,230	792,119	
Total for the year 1878 in francs .....		16,000,748	2,714,772	6,990,049
Total in United States currency .....		\$3,088,144	\$523,951	\$1,349,079
Total for the year 1877 in francs .....		20,276,225		
Total in United States currency .....		\$3,913,311		
Decrease in francs .....		4,275,477		
Decrease in United States currency .....		\$525,128		

I.—Statement showing the navigation between the United States and Belgium during the year 1878.

Flag.		Entered.				Cleared.			
		No. of vessels.	Tonnage.	Cargoes.	Crew.	No. of vessels.	Tonnage.	Cargoes.	Crew.
Austrian .....	{ with cargoes.	9	5,906	5,604	132	3	1,858	1,858	44
	{ in ballast.					4	2,903		65
Belgian .....	{ with cargoes.	53	91,110	91,110	2,250	44	79,811	79,051	2,417
	{ in ballast.					4	5,227		95
Danish .....	{ with cargoes.	3	493	491	16				
	{ in ballast.								
Dutch .....	{ with cargoes.	7	2,161	2,153	49	1	1,331	1,331	19
	{ in ballast.								
English .....	{ with cargoes.	229	188,659	186,560	3,287	80	35,848	33,970	616
	{ in ballast.					78	73,401		1,226
French .....	{ with cargoes.	8	4,610	4,610	115				
	{ in ballast.					2	1,423		35
German .....	{ with cargoes.	41	27,166	26,842	553	21	17,796	15,659	421
	{ in ballast.					16	12,801		288
Italian .....	{ with cargoes.	13	7,890	7,332	180	3	2,138	1,414	46
	{ in ballast.					10	5,608		129
Russian .....	{ with cargoes.	7	4,154	4,154	107	3	2,075	1,820	43
	{ in ballast.					3	1,960		56
Spanish .....	{ with cargoes.	8	3,662	3,662	103				
	{ in ballast.								
Swedish and Norwegian .....	{ with cargoes.	117	69,952	69,121	1,594	18	10,417	9,028	246
	{ in ballast.					64	42,732		895
United States .....	{ with cargoes.	23	20,189	20,052	841	13	11,416	11,235	196
	{ in ballast.					14	13,243		290
Total .....	{ with cargoes.	518	425,952	421,191	8,727	136	162,690	155,366	4,042
	{ in ballast.					195	159,396		2,973

K.—Statement showing the value of declared exports from the consular district of Antwerp to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarters ending—				Total for year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Asphaltum .....			\$579 00	\$3,210 46	\$3,789 46
Barrels, empty petroleum .....	\$39,532 75	\$108,098 80	155,784 92	57,681 50	361,237 47
Books .....	1,262 08		3,561 47	1,015 22	5,838 77
Bows and arrows .....	255 05				255 05
Cement .....			371 55	183 35	554 90
Chicory .....	228 29	1,274 66			1,502 95
Chemicals .....				803 13	803 13
Church ornaments and vestments .....				1,433 75	1,433 75
Fancy goods .....				236 29	236 29
Gin and bitters .....	265 65	112 62	180 00	184 47	762 74
Glass .....	831 34				831 34
Glass-sand .....	525 00		1,949 25		2,474 25
Glycerine .....		3,045 04			3,045 04
Hides and skins, not elsewhere specified .....	42,689 44	5,851 03	95 59	42,177 00	90,843 06
Household effects .....		5,404 00			5,404 00
India-rubber shoes .....				77 20	77 20
Iron, rails, scraps, puddle bars .....				58,915 63	58,915 63
Marble .....		650 03			650 03
Meat, extract of .....	5,595 54	11,689 58	8,346 97	15,652 37	41,284 26
Paintings .....	2,838 29	5,879 36		2,539 49	10,757 14
Paints and colors .....	298 44		437 95		736 39
Paper .....	3,314 99	4,562 80	3,286 64	4,249 60	15,414 03
Perfumery .....		766 16	159 57		925 73
Roan-hides .....	17,623 96	5,430 46	12,888 36	10,861 56	46,804 34
Spiegeleisen .....	25,081 70	28,517 18	9,505 76	28,256 67	91,361 31
Steel, railway springs and tires .....		3,328 21		890 89	4,219 10
Stones .....				117 81	117 81
Sugar .....	76,250 92				76,250 92
Textile fabrics:					
Cotton .....			4,105 42		4,105 42
Linen .....				2,824 59	2,824 59
Silk .....	2,170 28	1,997 21			4,167 49
Willows, white .....		246 07	466 10	486 36	1,198 53
Wines and brandy .....	1,153 73		583 73	890 62	2,628 08
Wool .....			2,217 86	6,563 11	8,780 97
Zinc .....		4,976 56			4,976 56
Miscellaneous .....	866 62	354 68	780 67	844 41	2,346 28
Total in United States gold .....	220,303 77	192,158 95	205,300 81	239,795 48	857,554 01
Total for preceding year .....	306,493 80	145,383 82	146,334 47	200,912 17	799,124 26
Increase .....		46,770 13	58,966 34	38,883 31	58,429 75
Decrease .....	86,190 03				

## GREAT BRITAIN AND IRELAND.

*Report, by Consul-General Badeau, of London, on the commerce and industries of the United Kingdom for the years 1878 and 1879.*

In accordance with the provisions of paragraph 381 of Consular Regulations, I have the honor to submit my annual report upon the trade and industry of the United Kingdom, arranged and systematized so far as possible according to the instructions in the above-mentioned paragraph. The same difficulties exist as have already been reported by me in previous years, and, again, there is in some cases an absolute impossibility of complying with the exact instructions of the Department. No complete returns can be obtained of the fisheries, and none at all are made to the authorities here of manufactures or the products of the forests. I have also, as hitherto sanctioned, somewhat modified the character of the forms; but with these exceptions the returns are arranged under the heads and according to the rules prescribed. They

are made up to the latest dates practicable, and, unless otherwise stated, are for the year ending December 31, 1878. Those derived from the reports of subordinate consuls, or referring to the condition of the consulates as such, are for the year ending September 30, 1879.

#### TRADE IMPROVEMENT.

A study of these returns at once discloses the fact that a change for the better has recently occurred in the general condition of trade in the United Kingdom. The principal indications of this improvement are, first of all, a renewed American demand for British manufactures, especially of scrap and railroad iron; also, a distinct increase within the last few months in exports generally, rising prices in the wholesale markets, an upward movement on the stock exchange, and a decided change in the character of the returns of railroad traffic. It is true that the upward tendency has by no means reached the point attained in former years, and in many quarters fears are entertained that the improvement will turn out only temporary; but the general opinion of the country is confident, and the change which has now been going on for several months as yet shows no marks of diminution.

On all hands it is admitted that the American revival has been the original cause of this most desirable revolution here. The very great increase in the value of British exports to the United States, so apparent in the consular returns, at once infused new life into trade in these islands; manufactures also experienced the benefit when the demand for them was revived, and a healthier tone in all business circles became established. The nature of the development in trade with the United States is fully shown in this report, and while affording gratifying proof of fresh prosperity in commercial circles at home as well as here, it in no way indicates a diminished manufacturing success in America. It may, therefore, be contemplated with unalloyed satisfaction by our countrymen, as no one branch of industry appears to be thriving at the expense of another.

#### AGRICULTURAL PRODUCTIONS.

The total area under cultivation in the United Kingdom on the 4th of June, 1879 (exclusive of heath and mountain pasture, and woods and plantations), was 47,436,820 acres, of which 10,777,459 acres were under grain crops, 4,871,556 acres under green crops, 6,450,905 acres under clover, grasses, &c., and 24,395,905 acres were in permanent pasture.

There was a decrease during the year of 200,000 acres under grain crops, wheat showing 300,000 acres less and oats 100,000 acres less than in 1878. Barley was sown on 2,930,000 acres, an increase of 200,000 acres, and the largest recorded area. Oats decreased 130,000 acres, owing almost entirely to the reduction of the area under this crop in Ireland. Imported maize is being largely used as a substitute for oats.

Clover and grasses under rotation exhibit a decrease of 100,000 acres, and flax 16,000 acres.

Green crops increased by 40,000 acres, the additional land being devoted to the cultivation of potatoes.

Permanent pasture, or grass not broken up in rotation (exclusive of heath and mountain land), is increased by 300,000 acres.

The number of horses returned by occupiers of land in the United

Kingdom, on the 14th of June, 1879, as used solely in agriculture, unbroken horses and mares kept solely for breeding, was 1,955,394, an increase of 28,000; and the total number of cattle was 9,961,536, an increase of 200,000. The total number of sheep was 32,237,953, as against 32,571,018 in 1878, and of pigs 3,178,106, as against 3,767,960.

The average prices of British grain in 1878 were: wheat, 46s. 5d.; barley, 40s. 2d.; oats, 24s. 4d.

The summer of 1879 was disastrous to the agricultural interests of the country. Storms and heavy rain continued without intermission until autumn, and during the entire season there was not sunshine enough to ripen the crops.

In addition to a diminished acreage sown with wheat, the yield for 1879 has fallen to an average of 18 bushels per acre, or about 60 per cent. of the average yield of 29½ bushels. The average total consumption of wheat is about 22,500,000 quarters, of which nearly one-half is imported. The home yield for 1879 being under 6,000,000 quarters, the imports of wheat will have to be increased by about 5,500,000 quarters.

The keen competition which the British farmer experiences from the increasing imports of live stock, bacon and hams, butter, cheese, &c. (see under *imports*), added to the failure of the crops, has brought the agricultural industry to a state of depression, the like of which is certainly not within living memory.

The value of imports of live stock, grain and flour, and dead meat, and provisions in the year 1878 amounted to \$466,971,751, being at the rate of \$13.80 per head of the population of the United Kingdom.

#### MINES.

Owing to the quicker publication of the returns, figures have been given under this head for 1878 as well as 1877, since the date of my last report.

The output of coal decreased from 134,610,763 tons, valued at \$235,568,835, in 1877, to 132,654,887 tons, valued at \$232,146,050 in 1878. The amount of pig-iron produced in 1877 was 6,608,664 tons, value \$80,956,180, and in 1878 6,381,051 tons, value \$80,774,960.

The total number of persons employed in and about the mines in Great Britain and Ireland was 475,329.

#### NAVIGATION.

The British and foreign vessels engaged in the foreign trade during the year 1878 were, entered, 62,958 vessels of 25,293,721 tons, and cleared, 64,486 vessels of 26,301,358 tons. There is a decrease shown from the totals for the year 1877 in "entered" of 2,673 vessels and 327,452 tons, and in "cleared" a decrease of 842 vessels, but an increase of 391,454 tons. The decreased tonnage employed was entirely in foreign vessels, being in entries 373,851 tons (the total decrease being but 327,452 tons), and in clearances 87,723, although there was an increase in total tonnage cleared. More than two-thirds of the tonnage was British, and there is a continued decrease in sailing ships and increase in steamers.

## IMPORTS.

The total value of imports in the year 1878 was \$1,794,069,660, a decrease of \$124,782,093 from the value declared in the preceding year.

The largest items in the list of imports are—

Articles.	Quantity.	Value.
Grain .....	cwt. 131, 291, 680	\$287, 350, 697
Raw cotton .....	do. 11, 967, 679	163, 172, 606
Wool .....	pounds. 399, 449, 435	112, 518, 858
Sugar:		
Refined .....	cwt. 3, 266, 480	23, 250, 054
Raw .....	do. 14, 918, 381	77, 916, 016
Silk:		
Manufactures .....		62, 057, 881
Raw .....		17, 903, 769
Wood and timber .....		67, 985, 574
Tea .....	pounds. 204, 872, 899	63, 482, 349
Butter and cheese .....	cwt. 3, 765, 376	72, 492, 096
Flax and hemp .....	do. 7, 074, 847	42, 196, 179
Bacon and hams .....	do. 4, 295, 151	42, 176, 193
Animals .....	number. 1, 145, 587	35, 283, 928
Hides .....	cwt. 1, 613, 522	30, 552, 760
Wine .....	gallons. 16, 452, 538	29, 130, 687
Coffee .....	cwt. 1, 269, 677	38, 793, 410
Woolen manufactures .....		28, 872, 549
Seeds, flax and linseed .....	quarters. 1, 988, 829	23, 879, 688
Copper .....	tons. 179, 559	23, 276, 600
Tobacco .....	pounds. 93, 071, 031	17, 933, 017
Rice .....	cwt. 6, 109, 020	15, 572, 101

An increase in the imports of the following articles, since 1877, has occurred: Grain, increase of 6,663,487 cwts.; tea, 17,357,615 pounds; butter, 159,114 cwts.; cheese, 314,939 cwts.; bacon and hams, 1,474,669 cwts.; animals: oxen, &c., 52,269; sheep, 18,070; hides, 48,250 cwts.; woolen manufactures, value of increase, \$3,399,662; seeds, 282,033 cwts.; and tobacco, 14,945,882 pounds.

The following are the decreases from 1877: Raw cotton, 133,046 cwts.; wool, 10,499,763 pounds; sugar, refined, 163,373 cwts., and raw 1,702,563 cwts.; silk manufactures, \$510,825; raw silk, 271,285 pounds; wood and timber, \$30,622,299; flax and hemp, 77,477 cwts.; wine, 3,116,269 gallons; coffee, 338,605 cwts.; copper, 19,622 cwts.; and rice, 508,583 cwts.

The United Kingdom was most largely indebted to the following countries:

United States .....	\$433, 696, 117; increase from 1877 .....	\$55, 072, 758
France .....	201, 308, 329; decrease from 1877 .....	21, 622, 142
British India .....	133, 643, 851; decrease from 1877 .....	18, 264, 621
Germany .....	114, 672, 117; decrease from 1877 .....	13, 131, 350
Holland .....	104, 430, 100; increase from 1877 .....	7, 805, 100
Australia .....	101, 459, 677; decrease from 1877 .....	4, 263, 147

The total value of the imports from foreign countries in 1878 was \$1,414,910,485, and from British possessions abroad \$379,159,175.

## EXPORTS.

The value of exports of British produce and manufactures in the year 1878 was \$938,209,967, and that of exports of foreign and colonial produce \$256,069,003, making a total value of \$1,194,278,970, which was \$599,790,690 less than the total value of imports.

The total value of exports in 1877 was \$1,227,663,387, being \$691,188,366 less than the value of imports during the same year. The figures for 1878 therefore show a decrease in both instances.

The largest exports of British produce and manufacture were:

Cotton manufactures .....	\$257, 446, 938
Iron and steel (tons, 2,296,860) .....	89, 483, 112
Woolen and worsted manufactures (yards, 257,876,500) .....	81, 378, 144
Machinery .....	36, 477, 570
Linen and jute manufactures .....	34, 656, 689

The largest exports of foreign and colonial merchandise were:

Wool .....	pounds.. 199, 286, 544	\$59, 497, 213
Coffee .....	do..... 114, 835, 260	23, 022, 202
Cotton, raw .....	.....cwts.. 1, 314, 803	16, 744, 780
Tea .....	pounds.. 40, 229, 778	12, 640, 987
Rice .....	.....cwts.. 3, 844, 975	11, 828, 318

The countries to which the greatest values were exported were:

Germany .....	\$141, 910, 420
France .....	129, 389, 336
British India .....	119, 966, 847
Australia .....	104, 721, 796
United States .....	85, 292, 713

#### CUSTOMS DUTIES.

The gross amount of duties received during the financial year ending March 31, 1879, was \$98,993,331, showing an increase of \$1,483,261 over the preceding twelve months.

There was an increase in duties received upon tobacco of \$2,438,275, owing to the larger imports of that article, as well as to the additional duty of 4*d.* per pound levied. There was also an increase in duty received on teas, amounting to \$778,449. On spirits, wines, and other articles there were smaller receipts.

#### TRADE WITH THE UNITED STATES.

The total value of imports from the United States into Great Britain and Ireland in 1878 was \$433,696,117 (being 24 per cent. of the total imports from all parts), and the value of exports thereto was \$85,292,713.

As compared with 1877, there was an increase of \$55,072,758 in imports from the United States, and a decrease of \$11,469,702 in exports. The balance of trade in favor of the United States in 1878 was \$348,403,404, as against \$281,860,944 in 1877.

The leading importations were:

Grain of all kinds .....	\$147, 845, 009; increase .....	\$31, 859, 145
Raw cotton .....	123, 352, 216; increase .....	8, 431, 964

(These together being 60 per cent. of the imports from the United States.)

Bacon and hams .....	\$37, 165, 535; increase .....	\$8, 383, 821
Cheese .....	16, 086, 667; increase .....	860, 049
Tobacco and cigars .....	9, 816, 665; increase .....	744, 724
Animals .....	9, 682, 994; increase .....	7, 688, 923

The imports of the undermentioned products exceeded those in the year preceding by the amounts named:

Wheat, by cwts., 8,700,000; corn, cwts., 7,300,000; flour and meal, cwts., 2,360,000; barley, cwts., 270,000; raw cotton, cwts., 1,000,000; bacon and hams, cwts., 1,450,000; cheese, cwts., 260,000; unmanufactured tobacco, pounds, 18,000,000; oxen and bulls, 57,000; sheep, 32,400; swine, 16,400; horses, 1,700; lard, cwts., 330,000; hides, pounds, 3,400,000.

There were decreased imports of hops, iron, and steel, wrought or

manufactured, crude naphtha (1,000,000 gallons), petroleum, wood and timber, and cigars and manufactured tobacco.

The exports of British produce and manufacture to the United States were valued at \$70,795,850, a falling off of \$8,877,350 from those in 1877. Iron showed a decrease of \$1,500,000; woollens, of \$1,250,000; cottons, \$1,500,000; linens, \$1,500,000.

The exports of foreign and colonial produce from Great Britain to the United States amounted to \$14,496,863, being \$2,592,352 less than in 1877. The principal falling off was in wool, tea, and skins.

#### REVENUE AND EXPENDITURE.

The gross public revenue for the year ending 31st March, 1879, increased to \$415,579,860, falling short of the budget estimate by \$570,140, and being at the rate of \$12.29 per head of the population.

The gross public expenditure (including \$7,500,000 for the war in South Africa) amounted to \$427,038,945, showing a deficit of \$11,459,085. The expenditure was \$1,166,605 less than the budget estimate, and at the rate of 12.62 per head.

The gross revenue from customs was \$101,580,000; from inland revenue, \$247,500,000; and from post-office and telegraphs, \$37,875,000. The extra twopence in the pound on the income tax brought \$14,450,000; and the receipts for post and telegraphs were \$575,000 more than in the preceding year.

The charges for collection of revenue, exclusive of the packet service, amounted to \$35,865,845. The interest and service of the national debt cost \$143,220,915; the army and navy, \$61,068,270; and the civil list and civil charges, \$86,883,915.

#### POPULATION.

The population of Great Britain and Ireland in 1879 is estimated at 34,156,113. There was a decrease in the number of marriages in Great Britain during the year 1878, but the death rate shows an increase.

#### EMIGRATION.

The total number of emigrants in 1878 was 112,902, of whom one-half went to the United States, one-third to Australia and New Zealand, a tenth to the British North American Colonies.

#### EDUCATION.

The accommodation in the primary schools in Great Britain exhibits an increase of 300,000 places in the year 1878, and the total expenditure in government grants amounted to \$13,667,020.

#### THE POOR.

The total number of persons in receipt of relief in Great Britain and Ireland on January 1, 1879, was 986,904. There was an increase in England and Ireland, but a decrease in Scotland.

#### NATIONAL DEBT.

The total amount of the national debt at the end of the financial year in March, 1879, was \$3,890,394,200. The average price, in 1878, of the 3 per cent. public debt was 95 $\frac{3}{8}$  per cent.

## BANK OF ENGLAND.

The largest total amount of deposits in the Bank of England during 1878 was in March, amounting to \$168,545,000; and the smallest was in September, viz, \$121,665,000. The average liabilities were \$285,670,000, and the average assets \$302,325,000. The largest amount of Bank of England notes in circulation was in December, when it was \$153,345,000.

## POST-OFFICE AND TELEGRAPHS.

The net revenue from the postal and telegraph service for the financial year ending March 31, 1879, amounted to \$12,098,876.

The total number of letters and post-cards delivered in the country during the year increased to 1,208,000,000, or 3,537 per one hundred of the population. The number of newspapers and book packets delivered increased to 328,000,000.

The number of telegrams (exclusive of press service and news messages) forwarded through the postal telegraph service in 1878 was 22,477,921, being 500,000 more than in 1877.

There was a decrease in both number and total amount of money orders issued by the post-office in 1878 from the preceding year, in number of 1,300,000, and in amount \$9,000,000. The total number issued in 1878 was 17,442,356, amounting to 131,221,090.

## RAILWAYS.

The length of lines of railway open in Great Britain and Ireland at the end of 1878 was 17,335 miles, an increase of 258 miles, and the total capital paid up was \$3,502,811,495. The total working expenses amounted to \$166,071,190, and the net receipts to \$148,403,810, about 47 per cent. of the total receipts.

## DECLARED EXPORTS TO THE UNITED STATES FOR 1879.

In compliance with the requirements of consular regulations, I now proceed to embody in this report a statement of the condition of the various consulates in the United Kingdom. This statement relates especially to the business of the year ending 30th September, 1879, and is based partly upon correspondence and personal intercourse with the consuls, and partly upon their reports now forwarded; it is also supplemented in a great measure by the returns compiled in this office from the various forms D, showing the declared value of the exports to the United States from the respective consular districts during the year.

With this report is also forwarded a statement of the value of declared exports for the past seven years from the districts under my jurisdiction, so arranged as to show—

1. In their alphabetical order the value of exports from the various districts from 1873 to 1879, inclusive.
2. A summary giving the gross total for each year.
3. A recapitulation for the last seven years.
4. A recapitulation for the past twelve months.

Much time and labor have been bestowed on this return in order to render it accurate and comprehensive. For purposes of analysis, and to show at a glance the course of the export trade between this kingdom and the United States, I believe it will be found a faithful and valuable record.



My compilation of last year from Forms D exhibited a decrease in the value of exports of \$11,899,614 83, or a total decrease of more than 12 per cent. on the values of the preceding year. This year my compilation from the same sources exhibits an increase of \$15,719,613 85.32, being nearly 19 per cent. for the year ending September 30, 1879. The increase was in 21 consulates, the decrease in 3. The total value of exports from this kingdom to the United States for the year was \$98,479,994 32.08.

The following table exhibits the most important increases :

*Exports to the United States.*

<b>Belfast :</b>	
This year an increase of .....	\$1, 084, 929
Last year a decrease of .....	397, 332
<b>Birmingham :</b>	
This year an increase of .....	125, 758
Last year a decrease of .....	533, 357
<b>Bradford :</b>	
This year an increase of .....	261, 488
Last year a decrease of .....	1, 617, 302
<b>Cardiff :</b>	
This year an increase of .....	310, 427
Last year an increase of .....	194, 632
<b>Cork :</b>	
This year an increase of .....	29, 812
Last year an increase of .....	12, 357
<b>Dublin :</b>	
This year an increase of .....	119, 055
Last year an increase of .....	32, 850
<b>Dundee :</b>	
This year an increase of .....	470, 910
Last year a decrease of .....	181, 027
<b>Glasgow :</b>	
This year an increase of .....	1, 049, 345
Last year a decrease of .....	340, 156
<b>Leeds :</b>	
This year an increase of .....	145, 595
Last year a decrease of .....	292, 956
<b>Liverpool :</b>	
This year an increase of .....	3, 978, 011
Last year a decrease of .....	3, 500, 821
<b>London :</b>	
This year an increase of .....	5, 004, 290
Last year a decrease of .....	3, 312, 256
<b>Manchester :</b>	
This year an increase of .....	637, 557
Last year a decrease of .....	1, 699, 881
<b>Newcastle-on-Tyne :</b>	
This year an increase of .....	225, 016
Last year there was an increase of .....	44, 590
<b>Nottingham :</b>	
This year an increase of .....	1, 359, 016
In 1877 an agency of Sheffield.	
<b>Tunstall :</b>	
This year's return shows an increase of .....	82, 794
Last year there was an increase of .....	176, 181

I have now the honor to refer to the condition of the individual consulates.

**BELFAST.**

A substantial improvement in the export trade from this consulate to the United States has taken place during the past year. On reference to Form D\* it will be seen that there has been an increase in every

\* For details of exports to the United States, referred to by the consul-general as Form D, see reports from the several consulates in their proper places.

quarter of the year, as compared with the corresponding one of 1878, amounting in the aggregate to \$1,084,929.57, or an increase of over 17 per cent. Last year the decrease was about 6 per cent.

The following figures show the value of exports for the past seven years :

Year ending September 30—

1873.....	\$7,460,197 10
1874.....	7,737,266 18
1875.....	7,243,160 36
1876.....	6,244,088 77
1877.....	6,640,559 13
1878.....	6,243,226 62
1879.....	7,328,156 19

It will thus be observed that the exports for the past year exceed those of any year since 1874.

Emigration from this port to the United States, though not large, has increased during the past twelve months.

#### BIRMINGHAM.

The decline in the value of exports from this district to the United States, which was continuous from 1873 to 1878, inclusive, has at length received a check—the returns for 1879 exhibiting an increase of \$125,758, or more than 5 per cent.

The following figures from Form D show the course of trade at this important manufacturing center during the past seven years :

Year ending September 30—

1873.....	\$7,463,185 72
1874.....	5,778,957 84
1875.....	4,791,231 29
1876.....	3,135,234 92
1877.....	2,842,871 05
1878.....	2,309,513 42
1879.....	2,435,271 89

#### BRADFORD.

In my last report I noted a decrease in the value of exports to the United States from this consulate of no less than 22 per cent. as compared with those of the preceding twelve months. This year Form D exhibits an increase of \$261,488, or more than 4½ per cent. as compared with the preceding year.

The following figures show the value of exports from this district for the past seven years :

Year ending September 30—

1873.....	\$15,900,091 72
1874.....	13,841,819 21
1875.....	11,629,262 15
1876.....	7,197,347 88
1877.....	7,311,101 75
1878.....	5,693,799 37
1879.....	5,955,287 85

On reference to Form D it will be observed that the first two quarters of the year show a decrease of \$800,938, as compared with the corresponding quarters of the previous year; this large decrease is, however, more than counterbalanced by the increase in the last two quarters of the year, amounting together to \$1,070,426, of which the September quarter contributed nearly 93 per cent., or \$992,133. Whether this sudden and great increase will prove more than temporary, it is impossible yet to determine.

## BRISTOL.

Form D, for the year ending September 30, 1879, shows a decrease in the value of exports of \$2,095.96, or  $1\frac{1}{2}$  per cent., as compared with the preceding twelve months.

The exports to the United States for the past seven years have been :

Year ending September 30—

1873 .....	\$306, 901 76
1874 .....	305, 863 06
1875 .....	390, 595 58
1876 .....	217, 427 57
1877 .....	218, 222 00
1878 .....	166, 648 20
1879 .....	164, 552 24

## CARDIFF.

Form D, for this district, exhibits an increase in each quarter of the year ending September 30, 1879, amounting in the aggregate to \$310,427, or nearly 105 per cent. In my last report I was able to note the great improvement on the previous year of 190 per cent., and in 1879 six times the amount of business of 1877 was transacted at this center with the United States. But, although this improvement appears a large one, the export trade does not yet bear comparison with that of the year 1873, as the following statistics show :

Year ending September 30—

1873 .....	\$4, 411, 124 39
1874 .....	497, 161 78
1875 .....	445, 730 44
1876 .....	155, 294 69
1877 .....	102, 271 70
1878 .....	296, 903 74
1879 .....	607, 331 57

The principal exports are steam and house coal, iron and steel rails, tin plates and spiegel Eisen.

Coal prices remain unaltered. Collieries are being worked in hopes of better times, rather than from any advantage the owners derive from prices realized, for these, in many cases, barely cover the cost of working.

The month of September was an exceptionally busy one in the iron trade, and for the first time for many years orders were received at this point from the United States. Several iron works have recommenced work, and it is generally believed that important orders have been obtained.

The tin-plate trade also exhibits a marked increase, but the unfortunate and oft recurring differences between masters and men, as to wages and hours of labor, tend to drive the trade into other channels.

There are now three steamers running regularly between Cardiff, Swansea, and New York, bringing American products of all descriptions, including live stock.

## CORK.

Form D, from this consulate, for the year ending September 30, 1879, shows an increase in the value of exports, when compared with those of the preceding year, of \$29,812.94, or more than 56 per cent.

Hides and skins are the chief articles of export from this district.

The following figures show the declared value of exports for the past seven years :

Year ending September 30—

1873 .....	\$147, 571 32
1874 .....	115, 374 35
1875 .....	80, 159 58
1876 .....	37, 455 01
1877 .....	40, 845 71
1878 .....	53, 203 07
1879 .....	83, 016 01

#### DUBLIN.

Form D for this consular district shows an increase in each quarter of the year in the value of exports, when compared with those of the preceding twelve months, amounting in the aggregate to \$119,055.80, or more than 20 per cent.

Salted skins and ale and porter constitute the principal articles of export from this district to the United States.

The exports for the past seven years are as follows :

Year ending September 30—

1873 .....	\$1, 164, 020 68
1874 .....	928, 900 81
1875 .....	769, 660 39
1876 .....	639, 550 65
1877 .....	550, 311 80
1878 .....	583, 162 66
1879 .....	702, 218 46

#### DUNDEE.

Form D for this district exhibits an increase in the value of exports of \$470,910.35, or rather more than 10 per cent.

Each quarter of the year, except the second, shows an improvement, the last being most marked, the increase amounting to \$307,733, or more than 65 per cent. of the increase for the year.

The following figures give the declared values for the past seven years :

Year ending September 30—

1873 .....	\$7, 094, 321 53
1874 .....	6, 626, 6 8 74
1875 .....	5, 999, 913 37
1876 .....	5, 473, 143 70
1877 .....	4, 825, 588 12
1878 .....	4, 641, 560 47
1879 .....	5, 112, 470 82

Burlaps and linens continue to constitute by far the most important articles of export from this district.

Notwithstanding the continued dullness of the jute trade—the great staple of this center—the direct import of the raw material in 1879 to Dundee promises to exceed that of any former year in the history of that trade. The stock has been abundant during the past year, and consequently prices were low until the middle of May, when they reached the lowest point ever yet quoted for standard burlaps. Since that time, however, matters have taken a turn for the better—a change doubtless caused by the large shipments which have since been made to the United States. Many manufacturers are now of opinion that, with the raw material at its present figure and cheaper labor (the wages of the workers having been again reduced during the year), they can compete

more favorably with foreign competitors than at any time during the past four or five years. It is anticipated, however, that the return to the activity of old times will be slow, and, as Dundee has no longer the monopoly of this trade, the profits will not be so enormous as formerly.

Ship-building still continues inactive.

In the engineering and iron works of the district the masters in the spring of the year pointed out to their employes that it was impossible to undertake contracts unless the workmen agreed to an extension of the working hours from 51 to 54 per week without increase of pay; this the men very wisely assented to, and throughout Scotland this change in the hours of labor is being rapidly effected.

The report furnished by the consul for this district is very interesting and is carefully prepared.

#### DUNFERMLINE.

Form D for this district shows an increase in the value of exports each quarter of the year, as compared with those of the preceding twelve months, amounting in the aggregate to \$344,042.44.

Linens constitute more than 57 per cent. of the exports from this center.

Until 1878, Dunfermline was an agency of the Leith consulate; in that year the exports to the United States amounted to \$1,099,002.88; in 1879 they were \$1,443,045.32 in value.

#### FALMOUTH.

Form D for this district shows, for the third consecutive year, an increase over each of the preceding years, the increase for the past twelve months being \$12,216.83, or over 22 per cent. On reference to the following figures it will be observed that the declared exports for 1879 exceed those of any of the seven years embraced in my tabular compilation. This is the only instance of the kind under my observation.

Year ending September 30—

1873 .....	\$54,052 30
1874 .....	60,420 52
1875 .....	57,487 85
1876 .....	44,636 44
1877 .....	53,451 77
1878 .....	55,036 64
1879 .....	67,253 47

The increase in the value of exports has occurred principally in China clay and arsenic.

The great depression in the mining industries of this center alluded to in previous reports continued unabated in severity until August last, when some signs of activity were apparent, and an advance in the price of tin took place, followed by further advances, amounting altogether to £10 per ton upon the metal, which is equivalent to about £6 5s. on tin ore in the state in which it is sold from the mines.

Cornish mine adventurers and others entertain an opinion, based on the increasing consumption of tin and the falling off which has of late taken place in the imports of this article from Australia, that better times are at hand for tin mines. Should this be so, and remunerative prices rule, a great impetus will once again be given to Cornish mining, and all parts of Cornwall will be largely benefited.

The reports of the harvest in this district form no exception to those from other portions of the United Kingdom. The season has been the

wettest ever known. Cereals have suffered much. Wheat particularly is very deficient in quantity and grain very small.

As in former years, the report from the consul at this port is carefully prepared and furnishes much interesting and useful information.

## GLASGOW.

Form D for the year ending September 30, 1879, shows an increase in the value of exports from Glasgow, amounting in the whole to \$1,049,345, or more than 24½ per cent. Thread furnishes more than 36½ per cent. of the declared value of exports from this district.

The following statistics exhibit the values for the past seven years, viz:

Year ending September 30—	
1873 .....	\$8,262,433 89
1874 .....	6,377,818 61
1875 .....	5,796,289 62
1876 .....	5,101,128 94
1877 .....	4,589,156 85
1878 .....	4,249,000 00
1879 .....	5,298,345 00

The increase thus noted is largely due to the shipments in pig-iron to the United States. This resumption of activity in the iron trade has given a better tone to other industrial enterprises of this district, but further evidences of any decided improvement in general business are wanting.

The effect of the sudden and unexpected collapse of the City of Glasgow Bank, which took place on the 2d of October, 1878, will be seriously felt for a considerable time to come.

The weather in Scotland this year has been cold and wet beyond precedent, resulting in an almost total failure of crops of all kinds. A large number of the best farmers of Scotland are ruined, and it is stated that actual famine would result were it not for the unlimited stores of cheap breadstuff and other food constantly arriving from the United States. Another grave cause of concern is the ever-increasing number of unemployed; it is computed that there are at present 35,000 able-bodied persons out of work in Glasgow. This serious state of things is much aggravated by the antagonism of the employes towards the employer; notwithstanding the scarcity of employment, labor strikes are constantly recurring.

There is no improvement to report in the ship-building industry of this district.

Of the 11,000,000 pounds of American beef imported into this district, scarcely a pound is *retailed under that name*; the quality is so good that it is nearly all sold as the genuine home-fed article.

## HULL.

Until the last year Hull was an agency of the Leeds consulate. During the year ending September 30, 1879, the value of the exports to the United States was \$131,683.09.

The consul at this port has furnished a very intelligent and interesting account, historical and commercial, of this, probably one of the most important ports on the east coast of England. In his concluding remarks he alludes to the constant calls made for assistance by persons representing themselves to be American citizens in distress, and for whom no provision is made by the government, the result being a continual drain on the private purse of the official. These remarks, I may add, are applicable to every consulate under my jurisdiction.

## LEEDS.

Form D for this district shows an increase in the value of exports for the year ending September 30, 1879, as compared with the preceding twelve months, of \$145,595.37, or more than 10 per cent; last year the decrease was over 17 per cent.

Since my last report Hull, formerly an agency of Leeds, has been raised to the grade of a commercial agency; consequently, to form a correct estimate of the increase of the trade of this district with the United States, as compared with 1878, the value of the declared exports from Hull for the past year should be added; this would give nearer 20 than 10 per cent. increase.

Woolens, as in former years, form by far the chief article of export from this center.

The values of the declared exports for the last seven years are as follows:

Year ending September 30—

1873 .....	\$4,868,277 08
1874 .....	3,602,104 55
1875 .....	3,626,535 43
1876 .....	2,135,376 68
1877 .....	1,704,327 58
1878 .....	1,411,370 59
1879 .....	1,556,965 96

## LEITH.

Form D for this district, for the year ending September 30, 1879, shows a decrease of \$242,870.97, or nearly 40 per cent. of the value of exports as compared with 1878. This decrease is, however, more nominal than real. Since the date of my last report a consular agency has been created at Kirkealdy, formerly in this district, and attached to the commercial agency of Dunfermline. The latter place itself, prior to 1877, was an agency of the Leith consulate; thus, in order to arrive at a correct estimate of the course of trade at Leith, the figures for Dunfermline for the past two years should be added.

The returns of exports to the United States will then show for the

Year ending September 30—

1873 .....	\$2,996,418 26
1874 .....	1,862,032 28
1875 .....	2,294,385 65
1876 .....	1,779,976 39
1877 .....	1,671,257 79

Year ending September 30, 1878:

Leith .....	\$611,810 09
Dunfermline .....	1,099,002 88
	<hr/>
	1,710,813 97

Year ending September 30, 1879:

Leith .....	\$368,939 12
Dunfermline .....	1,443,045 32
	<hr/>
	1,811,984 44

It will be thus seen that there has really been a very sensible increase in the declared value of exports during the past twelve months in this district as it originally existed. With this explanation I now append the statistics for Leith proper, as found in my summary, viz:

Year ending September 30—

1873 .....	\$2,996,418 26
1874 .....	1,862,032 28
1875 .....	2,294,385 65

Year ending September 30—

1876 .....	\$1,779,976 39
1877 .....	1,671,257 79
1878 .....	611,810 09
1879 .....	368,939 12

Books now form the article of chief value from this district; last year it was linens.

Up to October 1, 1879, no Scotch wheat of the present season's crop had been offered for sale; the agricultural situation is gloomy to a degree; fields in the uplands still in September were quite green, and, taking everything into consideration, there is not the slightest doubt that the season of 1879 has been by far the worst that the Scotch farmers have known for years. In this connection it should be borne in mind that the gravity of the crisis—for it is undoubtedly such to the farming community—is materially aggravated by the fact that they have experienced no good harvests since 1876.

Throughout Scotland there is now a strong tendency to strict economy, both in living and in business.

Consequent on the agricultural depression, principally, it is expected that there will be an increased number of emigrants in 1880 to the United States; these will be of the better class, and possessed of more means than is usually the case.

#### LIVERPOOL.

Form D for this important district shows an increase in the last three quarters of the year ending September 30, 1879, as compared with the preceding twelve months, that for the last quarter being more than 50 per cent. greater than for the corresponding quarter of the preceding year. In my last report a decrease was shown of, as nearly as possible, 15½ per cent.; this year an increase has occurred of \$3,978,011.96, or nearly 21 per cent., being the largest increase at any consulate in the kingdom except London. The value of exports from this district is also greater than for any year since 1875.

Last year tin plates constituted more than 40 per cent. of the declared exports; this year they amount to over 39 per cent.; in this article alone there is an increase of \$1,118,326.44. Chemicals last year formed 20½ per cent. of the total value of exports; this year they amount to, as nearly as possible, 20¼ per cent.; the increase in the declared value being \$725,291.34, so that, in two articles alone, the increase for the year is \$1,843,617.78.

The following figures exhibit the total values of exports to the United States for the past seven years:

Year ending September 30—

1873 .....	\$36,095,983 86
1874 .....	31,791,783 75
1875 .....	27,307,312 61
1876 .....	22,947,802 20
1877 .....	22,585,056 66
1878 .....	19,084,235 15
1879 .....	23,062,247 11

It will thus be seen that the decline, which was continuous from 1873 to 1878, inclusive, has at length been staid.

The customs revenue at this port for 1878 amounted to \$15,047,813, against \$14,705,232 for 1877.

The total value of imports from the United States at this port was \$261,327,021 for 1878, against \$378,234,218 for 1877.



The various tabular forms furnished by the consul at this port contain much valuable information.

## LONDON.

On reference to my form D it will be seen that there has been an increase in the value of exports to the United States in each quarter of the year as compared with the corresponding quarters of the preceding twelve months, amounting, in the aggregate, to the very substantial sum of \$5,004,290.70.52, or over 25 per cent. increase, and more than a million dollars greater than at any other consulate. The increase has now been continuous for the last five quarters, and is most marked in the one just concluded, being then \$2,556,281.29.29.

The following are the total values of exports for the past seven years :

Year ending September 30—

1873.....	\$36,883,557 37.55
1874.....	29,402,080 24.52
1875.....	25,602,624 67.66
1876.....	20,509,669 26.54
1877.....	22,728,837 83.75
1878.....	19,416,581 34.56
1879.....	24,420,672 06.08

Upon reference to my recapitulation it will be observed that London maintains her pre-eminence in the export trade between the various consular districts and the United States.

## LONDONDERRY.

Form D for 1879, as compared with that for the preceding year, shows an increase in the value of exports to the United States of \$336.26, or about 18½ per cent.

Whisky is the article of chief value exported from this district.

The following statistics testify to the small amount of export business with the United States at this center :

Year ending September 30—

1873.....	\$173,295 77
1874.....	50,757 47
1875.....	5,585 02
1876.....	6,248 07
1877.....	792 18
1878.....	1,797 66
1879.....	2,133 92

## MANCHESTER.

Form D, from this the cotton center of the world, shows an increase in the exports to the United States for the year ending September 30, 1879, of \$637,557.39, or more than 7½ per cent. as compared with the preceding twelve months. In my last report I noted a decrease of more than 17 per cent.

The first two quarters of the year exhibit a decrease on the corresponding quarters of the previous year, amounting in the aggregate to \$449,180.26; but this was more than counterbalanced by the increase that took place in the last two quarters of the year, viz :

June 30.....	\$317,244 94
September 30.....	769,492 71
	<hr/>
	1,086,737 65

It will be observed that in this, as in other important districts of the kingdom, the greatest revival has occurred in the September quarter of the present year.

This year cottons constitute more than  $54\frac{1}{2}$  per cent. of the entire value of exports; last year they were 58 per cent. Chemicals are next, being more than  $7\frac{3}{4}$  per cent.; last year they stood at about  $8\frac{1}{2}$  per cent. Linens rank next, being over  $7\frac{1}{2}$  per cent.; rags and junk being nearly 7 per cent.

From the following statistics it will be seen that the decline, which was continuous at this point from 1873 to 1878, has at last taken a turn, owing chiefly to the large increase in value of exports during the past quarter:

Year ending September 30—

1873	.....	\$21,978,696 48
1874	.....	19,339,295 72
1875	.....	18,139,681 27
1876	.....	10,141,092 94
1877	.....	9,876,768 09
1878	.....	8,176,886 53
1879	.....	8,814,443 92

Notwithstanding this revival, it must not for one moment be imagined that trade at this important center stands on a satisfactory basis, as the well-considered report of the consul at Manchester most clearly demonstrates. A careful study of this report will repay those interested in cotton industries.

At Manchester no strikes have occurred during the past year, and the operatives have submitted to reductions amounting in the aggregate to over 15 per cent.; indeed, so many mills are working half-time and the number closed is so considerable that there is no difficulty in securing operatives at low rates of wages. Dull times have also seriously affected the financial resources of the trades unions connected with the cotton industry, and these are not now in a position to stand the drain on their funds which a strike of any magnitude would cause. It must be admitted that the operatives have exhibited commendable willingness to accept their full share of the suffering which long-continued depression has caused in their particular branch of industry.

During the past twelve months a large and increasing trade has been carried on here in American fresh meats.

A large increase in emigration may reasonably be expected from this point during the coming year. Constant applications for information on this subject are being made at the consulate, and the consul is of opinion that good would result if resident Americans of *known standing and character* were appointed as emigration agents. Much harm in the past has been done by adventurers who in many instances, to suit their own ends, have unscrupulously deceived emigrants.

#### NEWCASTLE.

Form D for this district, for the year ending September 30, 1879, shows an increase in the value of exports to the United States of \$225,016, or over 28 per cent. as compared with the preceding twelve months. Sodas constituted  $31\frac{1}{4}$  per cent. of these; furs and skins rank next, being over  $19\frac{1}{4}$  per cent.; chemicals also amount to more than  $19\frac{1}{4}$  per cent.

It will be seen from the following statistics that, although a considerable improvement has taken place during the past two years, the export business between here and the United States still falls considerably

short of what it was in 1874, and does not amount to one-third of what it was in 1873.

Towards the end of the year a reaction from the long-continued depression of trade was experienced in this district, caused, in a great measure, by the numerous orders from the United States for pig-iron. Prices have risen, and the makers of this article are satisfied that the revival is natural and healthy, and that prices will continue to improve.

The report and tabular forms from the consul at this port contain much useful information.

The exports for the past seven years to the United States have been :

Year ending September 30—

1873 .....	\$3, 259, 780 96
1874 .....	1, 179, 818 65
1875 .....	835, 181 00
1876 .....	839, 007 29
1877 { .....	640, 836 16
{ .....	107, 863 09
1878 .....	793, 289 86
1879 .....	1, 018, 306 44

#### NOTTINGHAM.

Form D, from this district, exhibits an increase in exports to the United States of \$1,359,016.71, or over 44 per cent. This increase is principally in the lace trade, essentially the staple of this center, the increase in that branch alone being \$1,011,970.

Until 1877 Nottingham was an agency of the Sheffield consulate; since then the returns have been as follows :

Year ending September 30—

1878 .....	\$3, 062, 216 71
1879 .....	4, 421, 233 42

#### PLYMOUTH.

Form D for this district, for the year ending September 30, 1879, as compared with that of the preceding twelve months, exhibits a decrease of \$10,862, or over 50 per cent. ; as in former years, nearly the whole of the exportation from this district consists of China clay, which this year is more than 97 per cent. of the entire value of declared exports; no shipments to the United States occurred at this point during the first two quarters of the year.

The building of wooden ships, one of the principal industries of this port, continues very inactive, and very few of the copper mines in the neighborhood have of late paid their working expenses.

The wheat harvest here is fully one-third under the average, and the quality indifferent; the weather has been ungenial; rain fell almost weekly, and there was but little sunshine during the summer.

The declared values of exports from this district for the past seven years are as follows :

Year ending September 30—

1873 .....	\$37, 594 90
1874 .....	22, 038 70
1875 .....	4, 980 56
1876 .....	1, 620 26
1877 .....	21, 071 69
1878 .....	21, 473 99
1879 .....	10, 611 34

## SHEFFIELD.

Form D for this district exhibits an increase in the value of declared exports for the year ending September 30, 1879, of \$583,499.69, or more than 27 per cent. as compared with the preceding twelve months. Steel constitutes 32 per cent. of the declared value of exports; cutlery more than 29½ per cent.

The following figures give the value of declared exports for the past seven years from this district:

Year ending September 30—

1873.....	\$14,197,614 72
1874.....	11,309,037 51
1875.....	7,725,718 08
1876.....	5,698,197 78
1877.....	5,720,331 20
1878.....	2,140,443 49
1879.....	2,723,943 18

Of the many industries at this point, that of the file trade has been one of the largest; it is now in a most disorganized condition; the competition has been most severe, owing chiefly to the efforts of American houses.

The imports of American food-products into this district are enormous, and constantly increasing.

The result of the great depression in trade, it is thought, must lead to a large amount of emigration in the future.

## SOUTHAMPTON.

Form D exhibits an increase in the declared value of exports for the year ending September 30, 1879, as compared with the preceding twelve months, of \$19,652.94, or over 44 per cent.; but Southampton having been, during the first three-quarters of 1878, an agency of the consulate-general, at London, the returns for that period were included in my own Form D, and therefore what appears an increase, is in reality a decrease.

Live stock constituted more than 65 per cent. of the entire value of declared exports for the year ending September 30, 1879, but in consequence of the prohibitory edict upon the exportation of breeding cattle to the United States, none have been shipped during the last two quarters of the year.

The following are the declared values of exports for the past seven years:

Year ending September 30—

1873.....	\$39,774 58
1874.....	17,662 67
1875.....	9,786 58
1876.....	20,653 69
1878.....	44,536 28
1879.....	64,189 22

## TUNSTALL.

Form D shows an increase of \$82,794.96, or over 3 per cent. in the value of exports for the year ending September 30, 1879, when compared with the preceding twelve months. Last year I had to report an increase of more than 7 per cent.

Earthenware represents more than 91 per cent. of the total value of declared exports to the United States from this district during the past year.

It is curious to note that the increase has occurred in the last three quarters of the year, that for the September quarter being as nearly as possible equivalent to the decrease which took place in the first quarter (December) of the year.

The following are the figures for the past seven years :

Year ending September 30—

1873.....	\$4,211,584	33.45
1874.....	2,913,201	94.65
1875.....	2,722,526	55.55
1876.....	2,568,707	12.00
1877.....	2,428,483	17.00
1878.....	2,604,681	77.00
1879.....	2,687,476	73.00

*Recapitulation of the value of the exports to the United States as declared at the several consulates for the year ending September 30, 1879.*

London .....	\$24,420,872	05.08
Liverpool .....	23,062,247	11.00
Manchester.....	8,814,443	92.00
Belfast.....	7,328,156	19.00
Bradford.....	5,955,267	85.00
Glasgow.....	5,298,345	00.00
Dundee.....	5,112,470	82.00
Nottingham.....	4,421,233	42.00
Sheffield.....	2,723,943	18.00
Tunstall.....	2,687,476	73.00
Birmingham.....	2,435,271	89.00
Leeds.....	1,556,965	96.00
Dunfermline.....	1,443,045	32.00
Newcastle.....	1,018,306	44.00
Dublin.....	702,218	46.00
Cardiff.....	607,331	57.00
Leith.....	368,939	12.00
Bristol.....	164,552	24.00
Hull.....	131,683	09.00
Coak.....	83,016	01.00
Falmouth.....	67,253	47.00
Southampton*.....	64,189	22.00
Plymouth.....	10,611	34.00
Londonderry.....	2,133	92.00
Total.....	\$96,479,994	32.08

ADAM BADEAU.

UNITED STATES CONSULATE-GENERAL,  
*London, November 24, 1879.*

\* This amount represents the exports for the September quarter of 1878. Southampton having only at the commencement of that quarter been erected into a consulate, the four quarters of the year 1877, and the first three quarters of 1878, were embodied in the returns of the consulate-general at London, of which Southampton was during that period an agency.

Statement showing the value of the declared exports from the several consulates of the United Kingdom to the United States for the year ending September 30, 1879, together with value for preceding year; also column exhibiting decrease or increase for period named.

District.	Staple (if any).	1879.	1878.	Decrease.	Increase.
Belfast.....	Linens	97,328,156 18 00	96,243,236 62 00		\$1,084,929 57 00
Birmingham.....	Hardware, cutlery, steel, &c	2,435,271 88 00	2,300,513 42 00		135,758 47 00
Bristol.....	Stuffs	5,955,287 85 00	5,693,799 37 00		261,488 48 00
Cardiff.....	Chemicals	164,553 34 00	166,648 20 00	2,095 86 00	
Cork.....	Spiegelglas tin-plates	607,331 57 00	290,903 74 00		316,427 83 00
Dublin.....	Hides	83,016 01 00	53,303 07 00		29,713 94 00
Dundee.....	Salted sheep-skins, ale, and porter	702,318 46 00	583,163 66 00		119,055 80 00
Dunfermline.....	Barlups	5,112,470 82 00	4,641,560 47 00		470,910 35 00
Falmouth.....	Linens	1,443,945 32 00	1,090,602 88 00		344,042 44 00
Glasgow.....	China-clay	67,253 47 00	55,036 64 00		12,216 83 00
Hull.....	Threads	5,298,345 06 00	4,249,000 00 00		1,049,345 06 00
Leeds.....	Colors and ale	1,131,683 08 00			1,131,683 08 00
Leith.....	Woolens	1,556,965 94 00	1,411,870 59 00		145,095 35 00
Liverpool.....	Books	398,939 13 00	611,810 09 00	212,870 97 00	
London.....	Tin-plates	23,062,247 11 00	19,084,285 15 00		3,978,011 96 00
London.....	Miscellaneous	24,420,872 05 08	19,416,581 34 56		5,004,290 70 53
Manchester.....	Whisky	2,153 92 00	1,797 66 00		356 26 00
Manchester.....	Cottons	8,814,443 92 00	8,176,896 53 00		637,547 39 00
Newcastle-on-Tyne.....	Chemicals, furs, and skins	1,018,306 44 00	793,289 88 00		225,016 56 00
Nottingham.....	Leas goods	4,421,283 42 00	3,062,216 71 00		1,359,016 71 00
Plymouth.....	China-clay	10,611 84 00	21,473 92 20	10,862 58 20	
Sheffield.....	Steel and cutlery	2,723,943 18 00	2,140,443 49 00		583,499 69 00
Southampton.....	Live stock	64,189 23 00	44,536 23 00		19,653 00 00
Tunstall.....	Earthenware	2,687,476 73 00	2,604,681 77 00		82,794 96 00
Totals.....		98,479,994 32 08	82,700,380 46 76	255,829 51 20	15,975,443 36 33

## SUMMARY.

Total for year ending September 30, 1879.....	\$98,479,994 32 08	Increase in 21 consulates.....	\$15,975,443 36 33
Total for year ending September 30, 1878.....	82,760,380 46 76	Decrease in 3 consulates.....	255,829 51 20
Net total increase.....	15,719,613 85 32	Net total increase.....	15,719,613 85 32

[The following statements, accompanying the consul-general's report, are taken from British official publications.]

*Statement showing the total area and acreage under cultivation, and the number of live stock, in the United Kingdom on June 4, 1879.*

## AGRICULTURE.

Description.	England.	Wales.	Scotland.	Ireland.	United Kingdom, including Isle of Man and Channel Islands.
	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>	<i>Acres.</i>
Total area.....	32,597,398	4,721,823	19,496,132	20,819,947	77,628,947
Total under crops, bare, fallow, and grass.....	24,503,882	2,758,743	4,713,159	15,836,222	47,436,820
Grain crops.....	7,113,122	481,577	1,390,535	1,761,800	10,777,459
Green crops.....	2,736,488	126,951	690,879	1,294,636	4,871,556
Clover, sanfoin, and grasses under rotation.....	2,674,949	347,473	1,450,951	1,937,348	6,450,905
Permanent pasture or grass not broken up in rotation (exclusive of heath or mountain land).....	11,233,526	1,773,811	1,159,387	10,198,139	24,395,905
Flax.....	6,970	12	73	128,004	135,080
Hops.....	67,671				67,671
Bare, fallow, or uncropped arable land.....	671,156	28,919	21,334	16,295	738,264

## NUMBER OF LIVE STOCK.

Horses returned by occupiers of land..	1,100,707	136,391	195,747	513,036	1,955,394
Cattle.....	4,128,940	643,815	1,083,601	4,067,094	9,961,536
Sheep.....	18,445,522	2,873,460	6,838,098	4,017,889	32,237,968
Pigs.....	1,771,081	192,757	127,721	1,071,990	3,178,106

## MINES.

*Statement showing the quantities and values of coal and metals produced in the United Kingdom in the years 1877 and 1878.*

Year.	Articles.	Quantity.	Value.
1877	Coal..... tons..	134,610,763	£47,113,767
1878	do..... do..	132,654,887	46,428,210
	Metals produced from British ores:		
1877	Pig-iron..... tons..	6,608,664	16,191,236
1878	do..... do..	6,381,051	16,154,992
1877	Fine copper..... do..	4,486	340,067
1878	do..... do..	3,952	271,042
1877	Metallic lead..... do..	61,403	1,262,600
1878	do..... do..	58,333	972,491
1877	White tin..... do..	9,500	695,162
1878	do..... do..	10,106	663,080
1877	Zinc..... do..	6,281	136,612
1878	do..... do..	6,309	123,025
1877	Silver from lead..... ounces.	497,375	113,950
1878	do..... do..	420,079	88,296
1877	Other metals.....		3,333
1878	do.....		10,196
1877	Total of coal and metals.....		65,856,727
1878	do.....		64,712,332

## NAVIGATION.

*Statement showing the vessels entered and cleared at the ports of Great Britain and Ireland during the year 1878, in the foreign trade.*

Flag.	ENTERED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
British .....	14, 285	4, 799, 076	22, 940	12, 528, 657	37, 225	17, 327, 733
Foreign :						
Russian .....	699	257, 619	37	20, 260	736	277, 879
Swedish .....	1, 669	406, 463	506	258, 786	2, 175	666, 249
Norwegian .....	5, 641	1, 765, 196	143	67, 183	5, 784	1, 832, 379
Danish .....	2, 685	365, 349	483	251, 954	3, 168	617, 303
German .....	3, 576	799, 780	933	571, 241	4, 509	1, 371, 030
Dutch .....	821	119, 813	645	407, 191	1, 466	527, 004
Belgian .....	11	2, 897	852	257, 207	863	260, 104
French .....	3, 412	364, 982	992	372, 549	4, 404	737, 531
Spanish .....	118	33, 675	340	199, 177	458	235, 852
Portuguese .....	38	7, 290	12	13, 373	50	20, 573
Italian .....	1, 144	624, 849	5	3, 334	1, 149	628, 683
Austrian .....	344	177, 230	2	1, 468	346	178, 698
Greek .....	48	19, 333	9	7, 887	57	27, 220
United States .....	522	516, 006	33	65, 358	555	581, 364
Other countries .....	12	6, 460	1	639	13	7, 119
Total foreign .....	20, 740	5, 466, 861	4, 993	2, 499, 127	25, 733	7, 965, 988
Total British and foreign .....	35, 025	10, 265, 937	27, 933	15, 027, 784	62, 958	25, 293, 721

Flag.	CLEARED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
British .....	14, 501	5, 051, 207	23, 307	12, 912, 543	37, 808	17, 963, 750
Foreign :						
Russian .....	720	267, 976	44	25, 481	764	293, 457
Swedish .....	1, 772	435, 401	516	265, 150	2, 288	700, 551
Norwegian .....	5, 761	1, 816, 361	148	63, 289	5, 909	1, 879, 650
Danish .....	3, 017	409, 477	491	257, 967	3, 508	667, 484
German .....	3, 830	870, 529	973	621, 416	4, 803	1, 491, 945
Dutch .....	770	118, 865	670	447, 862	1, 440	566, 727
Belgian .....	13	4, 942	841	252, 518	854	257, 460
French .....	3, 354	364, 392	1, 012	377, 770	4, 366	742, 162
Spanish .....	116	34, 233	346	203, 779	462	238, 012
Portuguese .....	38	7, 331	17	15, 124	55	22, 455
Italian .....	1, 198	654, 641	11	7, 533	1, 209	662, 174
Austrian .....	359	181, 639	1	288	360	181, 927
Greek .....	51	21, 309	10	6, 763	61	28, 072
United States .....	539	527, 358	33	65, 341	572	592, 699
Other countries .....	14	6, 767	13	6, 086	27	12, 853
Total foreign .....	21, 552	5, 721, 221	5, 126	2, 616, 387	26, 678	8, 337, 608
Total British and foreign .....	36, 053	10, 772, 428	28, 433	15, 528, 930	64, 486	26, 301, 368

*Principal branches of revenue for the year ending March 31, 1879.*

Customs .....	£20, 316, 000
Excise licenses, &c .....	27, 400, 000
Stamps .....	10, 670, 000
Land tax and house duty .....	2, 720, 000
Property and income tax, at five pence in the pound .....	8, 710, 000
Postal and telegraph services .....	7, 575, 000
Crown lands (net receipts) .....	410, 000
Interest on advances and miscellaneous .....	5, 314, 972
Total gross revenue .....	83, 115, 972



*Principal branches of expenditure.*

Interest and management of the national debt.....	£28,644,183
Civil list and charges of all kinds .....	17,376,783
Army and Navy, &c .....	32,213,654
Charges for collection of revenue .....	7,173,169
<b>Total gross expenditure.....</b>	<b>86,407,789</b>
<b>Gross revenue .....</b>	<b>£83,115,972</b>
<b>Gross expenditure .....</b>	<b>86,407,789</b>
<b>Deficiency of income .....</b>	<b>2,291,817</b>
<b>National debt:</b>	
Total debt on March 31, 1879 .....	778,078,840
<b>Coinage in 1878:</b>	
Amount of gold coined .....	1,158,780
Amount of silver coined .....	613,998
Amount of copper coined .....	17,024
<b>Total .....</b>	<b>1,789,802</b>
<b>Bank of England:</b>	
Average of deposits during 1878 .....	28,769,600
Average of weekly assets, 1878 .....	60,465,000
Average of weekly liabilities, 1878 .....	57,134,000
Average minimum rate of discount, 3½ per cent.	
<b>Bank notes payable to bearer on demand:</b>	
Average amount in circulation in Great Britain and Ireland in 1878 of the Bank of England, Bank of Ireland, and private and joint- stock banks .....	45,360,745
<b>Post-Office year ending March 31, 1879:</b>	<b>Millions.</b>
Number of letters delivered in Great Britain and Ireland (being 32 per head of the population) .....	1,097
Number of newspapers and book packets delivered .....	328
Number of post cards delivered .....	111
<b>Money-orders:</b>	
Number of money-orders issued payable in Great Britain and Ire- land in the year 1878 .....	17,442,356
Amount of the same .....	£26,244,218
<b>Telegraphs, year 1878:</b>	
Number of telegrams sent at postal-telegraph stations in Great Britain and Ireland (not including press, service, and news mes- sages) .....	22,477,921
<b>Railways, year ending December 31, 1878:</b>	
Length of lines open .....	miles.. 17,335
Total paid-up capital .....	£700,562,299
Number of passengers conveyed (not including season-ticket holders). Per mile .....	565,126,000 32,563
Total amount of traffic receipts .....	£60,486,000
Per mile .....	3,485
Total amount of working expenses .....	33,214,234
Per mile .....	1,916
Net traffic receipts for passengers, goods, and steamboats (including rents, &c.) .....	29,680,762
<b>Population:</b>	
Estimated number in 1879 .....	34,156,113
Total of births in 1878 .....	1,152,428
Total of deaths in 1878 .....	716,188
Total of marriages in 1878 .....	239,353
<b>Education: Primary schools in Great Britain in 1878:</b>	
Schools inspected in 1878 .....	19,291
Children's places .....	4,505,818
Average attendance .....	2,782,454
Children at government inspection .....	3,383,148
Total expenditure from Parliamentary grants .....	£2,733,404

**Emigration :**

Emigrants to British North America .....	10,652
Emigrants to United States .....	54,694
Emigrants to Australia and New Zealand .....	36,479
Emigrants to other places .....	11,077
<b>Total .....</b>	<b>112,902</b>
<b>Total of emigrants .....</b>	<b>77,961</b>

**Paupers in receipt of relief :**

In England and Wales, January 1, 1879 .....	800,426
In Scotland, May 14, 1878 .....	94,671
In Ireland, January 1, 1879 .....	91,807

**Sums expended in the relief and management of the poor during the year ending March 25, 1878 :**

In England and Wales .....	£13,615,297
In Scotland .....	918,789
In Ireland .....	1,072,569

**BIRMINGHAM.**

*Statement showing the exports from the consular district of Birmingham to the United States for the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Hardware, cutlery, steel and iron .....	\$41,296 48	\$53,553 96	\$51,505 28	\$82,950 42	\$229,315 14
Anvils and vices .....	8,276 16	13,387 74	5,763 23	14,490 12	41,916 25
Tin plates and metal .....		219 41		8,506 65	8,726 06
Chains, hoes, and scythes .....	16,558 80	8,517 48	5,702 41	12,126 46	42,915 15
Saddlery and skins .....	8,923 69	7,760 22	10,141 51	14,197 00	41,027 42
Guns and materials .....	137,965 75	94,087 69	88,480 13	220,584 13	540,087 70
Buttons, shell, and cotton goods .....	66,873 72	80,541 79	92,804 21	99,255 34	339,474 86
Chemicals and phosphorus .....	30,432 12	9,748 82	2,190 86	22,528 76	64,900 56
Superphosphate .....	48,141 25				48,141 25
Glass and ware .....	5,699 98	3,467 86	1,925 22	5,619 66	16,712 72
Pens and tips .....	20,846 01	27,651 73	22,920 51	28,171 07	99,589 32
Fancy goods and jewelry .....	50,481 12	58,727 70	39,056 10	73,246 09	221,510 61
Nickel and cobalt .....	2,200 74	395 41			2,596 15
Boot materials .....	6,583 80	11,535 87		3,601 21	21,720 88
Sundries .....	5,601 66	40,497 57	7,611 20	9,006 23	62,718 56
<b>Total for Birmingham .....</b>	<b>449,585 68</b>	<b>410,093 25</b>	<b>382,608 16</b>	<b>504,253 63</b>	<b>1,746,540 72</b>
<b>Total for Kidderminster .....</b>	<b>37,622 67</b>	<b>18,238 12</b>	<b>15,921 45</b>	<b>86,608 28</b>	<b>108,390 52</b>
<b>Total for Redditch .....</b>	<b>92,958 65</b>	<b>157,997 79</b>	<b>157,107 71</b>	<b>117,451 95</b>	<b>525,516 10</b>
<b>Total for Wolverhampton .....</b>	<b>6,845 87</b>	<b>1,771 30</b>	<b>8,923 80</b>	<b>2,296 56</b>	<b>14,824 55</b>
<b>Total for Birmingham dist</b>	<b>587,012 87</b>	<b>588,100 46</b>	<b>509,580 12</b>	<b>750,598 44</b>	<b>2,435,271 89</b>
<b>Total for Birmingham, 1878</b>	<b>671,608 59</b>	<b>589,911 04</b>	<b>444,193 48</b>	<b>653,330 31</b>	<b>2,309,513 43</b>
<b>Increase .....</b>		<b>48,189 42</b>	<b>65,396 64</b>	<b>97,268 13</b>	<b>125,758 47</b>
<b>Decrease .....</b>	<b>84,595 72</b>				

WILSON KING.

## BRADFORD.

*Statement showing the exports from the Bradford consular district to the United States during the year ending September 30, 1879, as compared with those during the year ending September 30, 1878.*

Articles.	Quarter ending—				Total.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Aniline dyes .....	\$917 46				\$917 46
Brandy .....				\$60 50	60 50
Blacking .....			\$184 16		184 16
Carpets and mats .....	11,493 75	\$17,900 50	17,950 08	43,785 48	91,129 81
Cotton .....	210 35	3,059 90	688 24	1,205 80	5,164 29
Card clothing .....	905 62		564 35	2,139 32	3,609 29
Calf hair .....		115 10		886 25	1,001 35
Cotton and silk .....		769 25			769 25
Camel hair .....		114 60			810 95
Gloves .....				696 35	122 12
Glasses .....			146 58		146 58
Hair and cotton .....			789 87		789 87
Iron and steel .....	6,974 52	7,383 52	9,554 32	10,502 20	34,414 56
Leather .....	1,275 27	2,386 70	1,383 32	1,266 40	6,361 69
Linen .....	737 25		318 38		1,055 63
Machinery .....	23,247 62	38,071 95	40,109 50	37,672 75	139,101 82
Mohair .....			415 00	3,534 08	3,949 08
Miscellaneous .....		250 00	905 25	1,495 00	2,650 25
Nails .....		2,388 52	4,162 80	788 60	7,339 92
Oil .....	1,472 00	904 40	3,378 80	1,029 50	6,784 70
Paper .....	143 78				143 78
Printed goods, books, and stationery .....	107 50		1,196 95	1,721 75	3,026 20
Raw skins .....	921 00				921 00
Stuffs .....	796,336 50	1,846,971 10	800,040 00	1,833,386 12	4,776,733 72
Silk .....	1,523 12	553 70	1,597 75	10,637 87	14,312 44
Sewing cotton .....			367 10	174 18	541 28
Soap, grease, and drysalts goods .....	10,192 06	3,150 82	8,584 05	12,898 10	34,825 03
Shawls .....				2,821 77	2,821 77
Silk waste .....	776 30	1,303 25			2,079 55
Velvets .....	9,446 00		2,032 10	24,577 75	36,055 85
Wool .....	3,584 75	35,887 62	71,166 25	452,147 00	562,785 62
Worsted .....	5,734 10	1,752 00	2,750 80	9,921 12	20,167 72
Woolens .....	19,669 50	6,365 72	14,850 29	13,179 00	54,164 51
Wool and cotton .....			1,494 80		1,494 80
Worps .....				363 65	363 65
Yarns .....	24,717 00	27,109 05	36,423 10	50,369 50	138,617 65
Total in United States gold .....	920,385 45	1,494,388 30	1,021,141 94	2,517,372 16	5,955,287 85
Total for preceding year .....	1,270,496 55	1,955,225 56	842,848 59	1,535,238 07	5,603,799 37
Increase .....			78,293 85	992,133 49	261,488 48
Decrease .....	350,101 10	458,837 26			

C. O. SHEPARD.

## BRISTOL.

*Report, by Consul Canisius, on the trade of Bristol with the United States, and the effects of American competition on the agriculture and manufactures of England.*

## EXPORTS TO THE UNITED STATES.

The export trade from my consular district to the United States during the year ending September 30, 1879, shows a decrease of \$2,095.96 as compared with the preceding year. The export would this year have shown an excess over the preceding year, if a local firm which exported sheep-skins (salted) largely to Boston and New York had not failed, in

consequence of which no salted roans have been exported from Bristol to the United States during the last three months.

If the value of all the merchandise shipped from Bristol to New York was reported in this office, as for instance tin plates and spiegelisen, the invoices of which are not submitted to me for examination and certification, the amount would exceed several millions of dollars, and Bristol would figure quite differently in my reports to the State Department as a shipping point for the export trade to the United States.

#### IMPORTS FROM THE UNITED STATES.

In former reports I have endeavored to show to your Department how much, from a commercial point of view, Bristol's importance to the United States has increased during my official residence here. Four or five years ago scarcely anything but petroleum, turpentine, resin, tobacco, grain, and Indian corn were imported at this port from the United States, but the list of merchandise has wonderfully increased and looks at present quite formidable—a good augury for the interests of our country.

The great difficulty in extending commercial relations is to get the interest of the merchants sufficiently aroused to convince them that new business connections could prove as convenient, and in the end more advantageous, than the old ones. Indeed, when I first directed the attention of the leading local commercial firms to the fact that many American manufactures surpassed the European in adaptability, beauty, and cheapness, and that America offered, for many goods, the very best purchasing market in the world—including even several kinds of cotton goods, hardware, Elgin and Waltham watches—I met with a smile of incredulity at my supposed ignorance of the prestige and great superiority of England over America as a manufacturing country. "We want grain and flour, raw cotton, tobacco, timber, turpentine, and resin from you, but no manufactured goods," was generally the reply.

Knowing that the Department of State had made it a prominent object to help, by means of its representatives abroad, to extend American commerce all over the globe, I felt that I was only acting in harmony with the Department's wish in seizing every opportunity to direct the attention of the merchants in my consular district to the great advantages offered in the American markets in manufactured goods. I subjoin a complete list of articles now regularly imported into Bristol.

The commercial dealings have proved so satisfactory that the eyes of merchants are now more than ever directed towards America, and it may be safely predicted that if our American manufacturers will continue to deal liberally with their English customers, and study the tastes and wants of the people this side the Atlantic, the already formidable list of American merchandise will lengthen from year to year. I deem it but just to mention here that the American Exporter, the American Mail and Export Journal, and the Scientific American, which are sent regularly to this office, have been of great service to me in bringing to the notice of the merchants in this district such American firms as were prepared to get into commercial relations with solid houses in this part of the country.

The following is the list of merchandise now imported into Bristol from the United States, which is becoming more and more the distributing port of the southwest of England:

Agricultural machinery.	Barley.	Butter.
Apples.	Beeswax.	Canned meats.
Axle-grease.	Bristles.	Canned fruits.
Bacon.	Broom-handles.	Cheese.

Clocks.	Linseed cake.	Scythe-stones.
Clover-seed.	Live stock.	Seed-oil (cotton).
Copper ore.	Logwood.	Show-cards.
Cordage.	Machinery.	Shoe-pegs.
Farina.	Manila rope.	Spokes.
Fish-oil.	Meat (fresh).	Starch.
Flax-seed.	Melodeons.	Staves.
Flour.	Naphtha.	Stearine.
Furniture.	Oats.	Sticks.
Grease.	Organs.	Sour-kront.
Glucose.	Oxide of zinc.	Sugar (lump).
Grape sugar.	Oysters.	Tallow.
Guts.	Paper hangings.	Timber.
Hams.	Pearlash.	Tobacco.
Hardware.	Pease.	Toys.
Hominy.	Petrolenni.	Turpentine.
Hops.	Plated ware.	Wash-boards.
Hubs.	Resin.	Wash-tubs.
Indian corn.	Sand-paper.	Wood pails.
Lard.	Slates (school).	Wood ware (small).
Lard oil.	Scythes.	Zinc ore.
Leather.		

## STEAM COMMUNICATION WITH THE UNITED STATES.

How much the commercial intercourse between this port and America has increased during the last three years can also be estimated by the fact that the Great Western Steamship Line has increased its number of steam vessels from three to seven. Besides, a new steamship line, also between Bristol and New York, has recently been established, consisting at present of two fine vessels (the *City of Bristol* and the *City of New York*), intended exclusively for freight. The safety of shipping has, too, been made perfect by the opening of the new "docks at Avonmouth" (to which I have already referred in several of my former reports), so that vessels of the largest size can now land as conveniently here as at Liverpool or Glasgow, Bristol being, however, the nearest to New York.

## DECADENCE OF AMERICAN SHIPPING.

Although this is a bright picture for the future of our relations with this ancient port, there is one feature connected with it that I do not like, viz, that the *carrying trade* is falling more and more into the hands of English capitalists. Not a single American steamship lands a cargo in this port, and the arrival of American sailing vessels is also greatly decreasing. When one takes into consideration the continual augmentation of the merchandise brought here from the United States, and the great interest involved in carrying freight, it is extremely unpleasant to see that our nation, producing as it does the vast amount of merchandise landed here, has to put nearly all of it into foreign bottoms for transportation abroad.

By referring to the annexed table of arrivals it will be seen that our merchant vessels are being steadily forced out of the service, while the Swedish tonnage is greatly increasing. How this evil is to be remedied remains a question. Judging from present indications, as they present themselves to my eye on examining the arrivals of American vessels during the past twelve months and the preceding nineteen years, I fear that we are losing ground more and more in the carrying trade, and that not only the English, but the Swedes and the Italians are steadily pushing us aside. If our citizens do not wish to be still more deprived of their share of the shipping trade between America and the West of Europe they must build plain but substantial steam vessels, as mer-

chants now invariably prefer steam to sail, though the freights may be considerably higher than when carried under canvas. Sailing vessels obtain only such freights as steamers do not want, such as timber, petroleum, naphtha, and turpentine, or cargoes the delivery of which is not limited to time. It might not be in the interest of American ship-builders if Congress were to alter the laws regarding the obligation to have all ships sailing under the United States flag built in the United States, but it is worth considering whether it would not be better to permit the construction of steamships at least wherever it may be done *cheapest*. The German steamers of the merchant marine, for instance, are all built in Great Britain, because they can be produced there at a much lower cost than in Germany.

#### IMPORTS OF LIVE STOCK.

The shipment of live stock into this port is constantly developing, and has recovered from the check which it temporarily received from the order of the privy council by classifying America under the scheduled countries. It would be greatly to the advantage of America if the order of the veterinary department of the privy council were rescinded, but the shipment of live stock into Bristol will even with this hinderance henceforward be considerable. I append a statement showing the number of American steers and sheep landed here during the past twelve months.

#### BRITISH VS. AMERICAN AGRICULTURE AND MANUFACTURES.

The prediction which I ventured in a former report relative to the crops has proved correct. The crops are in such a condition, in consequence of the almost constant rain, that famine would certainly ensue if Providence had not favored the United States with an abundant harvest. The bad effect that this misfortune has upon all business classes, except the grain dealers, is beyond calculation, and will necessarily accelerate a revolution in British agricultural interests. Statesmen, land proprietors, tenant farmers, and many other persons interested in the agriculture of Great Britain are freely ventilating their ideas in regard to the present condition of land-owners as well as of the tillers of the soil. The royal commission is trying in distant lands to discover the causes of the existing evils under which the British agriculturalists now suffer, in order to propose remedies for them. In my opinion, all remedies proposed, or to be proposed, will be of no avail so long as the United States produce such immense quantities of grain, cattle, sheep, hogs, cheese, butter, and lard as they have done in this and the preceding years.

It is simply impossible for the British farmer to compete with the farmer of the Mississippi Valley, especially as the communication between England and the United States is constantly being increased and perfected. Even if the land-owners of Great Britain (and there are but 200,000 in all, large and small) were to reduce the rents to half of what they are at present, it would still be impossible for the land-renters to make their expenses. Thousands of those hard-working men who deserve a better fate than is in store for them, through adverse circumstances and foreign competition will be forced to leave their rural abodes never to return to them; and persons who have capital to invest will not risk it in agriculture, even if they could rent the land under much more favorable circumstances than the retired and ruined farmers did. When

we take into consideration the enormous expenses connected with successful farming, *i. e.*, raising good crops, it can clearly be seen that the pursuit of farming cannot be remunerative in this country since, by means of the great steamship flotilla plying between the United States and England, America is brought so close to the gates of the British ports. I believe that even if the tenant farmers had the entire rent remitted to them, they could not, in the long run, struggle successfully against American competition, because the taxes and the fertilizing material consume all they can make by the closest application to their pursuit, and American competition must increase as thousands of acres of new land are yearly put under cultivation.

The importation of cattle, though already large, is at present only in its infancy, and the appearance, for instance, of American cheese on the tables of millions of consumers in Great Britain affects already, in a very decided manner, the prices which heretofore ruled in the numerous cheese markets. The Europeans generally lose sight of the fact, when they dilate upon and discuss the slow recuperation in business and industry in their respective countries, that America has made gigantic strides in building up her manufactories, being now able not only to supply most of her home markets, but also to compete sharply with the Europeans in their own markets. Thus, in the United States, the demand for merchandise produced on this side of the Atlantic is gradually but surely diminishing, whereas America formerly constituted the best market for the surplus manufactures of the English and continental merchants. The order of things is now evidently reversed; and to me this seems the principal reason why no sign is yet discernible in Europe, indicating a decisive revival of the manufacturing industries, as they flourished in 1873. Many think that the standing armies in the several countries is the cause of all this calamity; but when one considers that the millions of dollars required for the various wants of the armies are nearly all spent in the countries that sustain them, it is difficult to believe that the "soldier" is the cause why the "golden era" does not return. There are plenty of idle hands everywhere in Europe to supply the manufactories with laborers, if there were only some profitable markets in which to sell the goods. I believe that even if a general disarrangement were brought about the old prosperous times could not be recalled, because America can never again be the "milch cow" for Europe. Numbers of industrious laborers and mechanics will struggle yet awhile against their adverse circumstances, hopeful of a change for the better, but in a not distant future they will begin to see that their hopes are in vain. America, like a powerful magnet, is certain to draw them across the sea, and the United States will become more and more the Mecca for the hard-working and starving laborers of England and Germany.

The changes in the social and political status which must take place in Great Britain in consequence of the terrible state of business, commercial as well as agricultural, will be greater than most of her statesmen are ready to admit. And the cause of the fast progressing disarrangement of the agricultural interests, implying a complete revolution in the value and tenure of land in this country, cannot be removed, though the sky should in future smile perpetually on the beautiful fields of the British Isles, for the cause, as said, is *American competition*, against which even South Russia and Hungary will be unable to cope. Thousands of English farms lie forsaken by the husbandmen, and many more must share the same fate. It is true, the past season has been exceptionally bad for the crops on account of the rains which have almost

deluged the country (as may be seen from the annexed table giving the fall of rain during the past year\*). Such a rainfall may not occur again for a long time; still, the seasons, as experience teaches, are extremely uncertain in Great Britain.

The farmers scattered over the vast expanse of land through which the Mississippi rolls its waters are inevitably causing a great fall in the value of land in Great Britain, as even the price of land in some of the Eastern States of our Union has already been reduced, and the income of many a landlord will in future be but half of what it has been heretofore.

In the impending metamorphosis through which some of the social institutions are threatening to pass, the middle classes will become stronger and more powerful than they are at present; while the aristocracy will become poorer, and its loss of power in a political and social aspect will keep pace with the shrinkage of its exchequer.

In conclusion, I beg to submit a quotation from a leading article which appeared some time ago in the Bristol Times and Mirror, the conservative paper of this city. The article was headed "American Competition." The quotation which I make from the able editor's lament truthfully portrays the situation, and on that account is very interesting; it runs as follows:

Where is this American competition to end? The Yankees are threatening to take the leather trade out of our hands now. American locks are superseding those of Staffordshire; American apples are taking the place of those of Somersetshire and Devon in the dye-works. American furniture is to be found in many forms in more houses than the inhabitants themselves are aware of, and many English sideboards next Christmas will probably groan under American barons of beef. You cannot go into an ironmonger's shop without finding his cases full of American notions; locks which are lighter and cheaper than those of English make, and if, perhaps, not so well made and substantial, sufficiently well made for the purpose, and, to look at, neater than those which bear the mark of English makers. Even the English agriculturists themselves are cultivating their fields, reaping and gathering their crops, when they can gather them at all, with implements of American invention and American manufacture. There is not a farm within the four seas where machinery is in use at all that American machinery is not to be found. American mowing and reaping machines, American hay-forks, everything that you need in harvest work, if you wish to economize labor, is to be found upon the farms of Norfolk, Northumberland, and Gloucestershire, and everywhere the American implements seem to be preferred, because they are handier, lighter, and cheaper than the corresponding implements of English manufacture. This ought not to be, and if England is not to be superseded in her own markets, it is not to be. The Yankees have many advantages over us in soil and climate, and as far as the productions of the land are concerned, in grain and meat especially, they may, with a rich and virgin soil, be able to produce, with less labor, more than we can produce with the aid of costly artificial manures which we require to stimulate our soil; but to be superseded, as we are being superseded to-day in so many branches of industry, where intelligence and skill are the chief things concerned, implies something wrong in higher quarters.

In intelligence, enterprise, and energy, we have flattered ourselves till now that we could hold our own against all the world, and even now Lord Derby has been congratulating us that we shall still be able to compete with the American grazier if we cannot possibly compete with the American wheat-grower. But is this the case? The American beef and mutton is perhaps not equal or anything like equal to the best English grass-fed beef and mutton; but it is said to be infinitely superior to the second and third rate English beef and mutton that constitute the staple articles in the market, and if that is the case, the American graziers will monopolize the bulk of the trade in a few years, as the farmers of Illinois and Minnesota are monopolizing the trade of Mark lane to-day.

THEODORE CANASIUS.

UNITED STATES CONSULATE,  
*Bristol, September 30, 1879.*

---

\* See meteorological reports in the supplement which forms part of this volume.



*Statement showing the value of declared exports from the consular district of Bristol to the United States during the four quarters ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Annatto.....	\$412 52	\$247 04	.....	\$306 48	\$966 04
Books.....	3,356 82	827 78	\$1,340 00	2,970 10	8,494 70
Bricks.....	1,173 00	860 40	1,890 48	2,812 24	6,736 12
Cattle.....	.....	.....	.....	12,440 00	12,440 00
Chemicals.....	9,320 26	8,992 18	5,226 54	12,781 48	36,320 46
Chocolate.....	2,593 86	3,212 34	2,042 66	481 86	8,330 22
Color.....	1,136 70	.....	2,264 50	.....	3,395 20
Cloth.....	.....	.....	.....	3,608 30	3,608 30
Flock.....	233 00	.....	.....	.....	233 00
Miscellaneous.....	1,663 74	2,014 28	3,227 58	439 00	7,344 60
Nets and twine.....	322 70	822 46	1,145 00	1,447 88	3,737 54
Oil cloth.....	528 94	267 34	.....	239 06	1,035 34
Rennets.....	.....	7,121 58	.....	256 92	7,372 50
Rugs.....	.....	562 46	.....	618 70	1,181 16
Skins.....	10,697 18	1,342 24	488 14	.....	12,527 56
Spiegelstein.....	.....	.....	.....	5,404 32	5,404 32
Webs.....	.....	.....	.....	156 52	156 52
Total in United States gold.....	31,432 72	26,270 10	17,624 90	48,955 86	119,283 58
Total for Gloucester.....	2,787 28	12,258 90	7,920 30	22,302 10	45,268 58
Total for Bristol district.....	34,220 00	38,529 00	25,545 20	66,257 96	164,552 24
Preceding year.....	47,857 37	46,523 58	24,870 50	47,396 75	166,648 20
Increase.....	.....	.....	674 78	18,861 21	.....
Decrease.....	13,637 37	7,994 58	.....	.....	2,095 96

*Number, tonnage, and nationality of vessels and steamships arrived at the port of Bristol from October 1, 1878, to September 30, 1879.*

Countries.	Number of vessels.		Tonnage.	
	This year.	Preceding year.	This year.	Preceding year.
America.....	9	30	6,820	16,967
Austria.....	8	31	4,617	15,985
Denmark.....	19	18	4,029	3,115
France.....	44	82	6,396	11,080
Germany.....	37	47	14,437	16,811
Great Britain.....	710	658	320,048	255,861
Greece.....	9	10	5,405	3,166
Holland.....	11	6	1,980	945
Italy.....	38	38	21,637	19,069
Norway.....	113	63	47,595	31,909
Portugal.....	11	120	1,907	49,621
Russia.....	5	15	2,388	2,429
Spain.....	1	7	558	2,874
Sweden.....	28	3	8,624	2,020
Increase.....	1,038	1,128	446,449	431,872
Decrease.....	90	.....	14,577	.....

Total British tonnage for the year.....	Tons.
Total foreign tonnage for the year.....	320,048
Excess of British over foreign.....	126,401
	193,647

*Statement showing the arrivals of American vessels at the ports of Bristol and Gloucester during the last twenty years.*

Years.	Bristol.		Gloucester.	
	No.	Tonnage.	No.	Tonnage.
1859	62	Not given.	—	—
1860	50	31,192	8	2,894
1861	116	78,511	39	20,662
1862	64	39,478	14	6,557
1863	28	22,406	8	3,522
1864	16	12,083	3	Not given.
1865	10	10,078	5	2,976
1866	2	1,539	3	1,961
1867	11	7,332	8	4,151
1868	24	18,979	0	—
1869	29	24,070	8	5,895
1870	40	33,860	7	3,155
1871	39	34,700	10	6,097
1872	29	27,834	1	461
1873	26	24,251	2	1,692
1874	30	23,252	9	5,145
1875	40	27,129	17	7,254
1876	42	22,341	46	18,245
1877	34	19,892	19	8,966
1878	19	11,538	10	5,361
1879*	9	6,820	3	2,273
Total	729	477,215	220	107,267

\* The figures in this table are taken from the 1st of January to 31st of December of each year, excepting the present year, which is only given for nine months.

*Statement of cattle and sheep landed at Bristol and Avonmouth docks from the United States of America from October 1, 1878, to September 30, 1879.*

Date.	Ship.	Oxen.	Sheep.
From October 1, 1878, to June 24, 1879.		399	3,282
June 21, 1879.	Cornwall	—	490
June 27, 1879.	Somerset	—	346
June 28, 1879.	Rheubina	88	25
July 10, 1879.	Bristol	—	1,338
July 13, 1879.	Castalia	211	—
July 22, 1879.	Syrian	120	334
July 25, 1879.	Devon	59	611
July 28, 1879.	Kate Fawcett.	66	—
July 30, 1879.	Corsica	95	94
July 31, 1879.	Cornwall	—	484
July 22, 1879.	Acadia	—	860
August 2, 1879.	Kate Fawcett.	65	297
August 6, 1879.	Aragon	126	367
August 7, 1879.	do		
August 8, 1879.	Sidonian	254	49
August 9, 1879.	Rheubina	94	61
August 13, 1879.	Somerset	123	396
August 19, 1879.	Scandinavian	90	—
August 27, 1879.	Bristol	58	360
September 4, 1879.	Caledonia	168	194
September 8, 1879.	Belsize	111	438
September 15, 1879.	Aragon	—	514
September 20, 1879.	Cornwall	—	769
		2,127	11,309

## FALMOUTH.

*Report, by Consul Fox, on the mines and fisheries of Cornwall, and on the trade and commerce of Falmouth, for the year ending September 30, 1879.*

I beg to submit the following report on the trade, navigation, and commerce of my consular district during the year ending this day :

## CORNISH MINES.

**Tin.**—There is no great improvement in the condition of the mining industries of this county. The great depression, the existence of which I have referred to in previous reports, continued in unabated severity until about a month ago, when an advance took place in the value of tin, and matters consequently began to assume a more hopeful aspect. This upward tendency has since been followed up by further advances amounting altogether to £10 a ton upon the metal, which is equal to £6 5s. on tin ore in the state in which it is sold from the mines. The general opinion of mine adventurers appears to be that better times for tin mines are approaching. This idea is based on the increasing consumption of tin and the falling off which has recently taken place in the quantities imported from Australia. Most of the Cornish mines are worked for tin, and should the value of that metal advance materially a great impetus will again be given to Cornish mining, and all parts of the county will be largely benefited thereby.

**Copper.**—Although copper mines are less numerous in Cornwall than those producing tin, they yet form one of the staple industries of the country. I subjoin some statistics showing the quantity of copper ore sold during the year ended June 30, 1879, and the average price realized for it. It will also be seen from these figures that the average standard for this metal during the same period has been £86 14s per ton—the lowest average standard for many years—the result being that nearly all the copper mines in my district have been working at a loss to the adventurers.

*Particulars of copper ores sold in Cornwall from June 30, 1878, to June 30, 1879.*

Copper ores .....	44,788 21-cwt.
Fine copper .....	3,129 tons 7-cwt.
Amount of money .....	£148,157 8s.
	£ s. d.
Average produce .....	— — 7
Average standard .....	86 14 0
Average price .....	3 6 0

## Compared with the previous year—

Copper ores, decrease .....	6,659 21-cwt.
Fine copper, decrease .....	493 tons 5-cwt.
Amount of money, decrease .....	£39,183 10s. 6d.

*Particulars of copper ores sold at the ticketings in Cornwall from June 30, 1860, to June 30, 1879.*

[Extracted from Grylle's annual mining sheets.]

Date.	Ore.	Money.	Prod.	Standard.	Date.	Ore.	Money.	Prod.	Standard.
	21-cwts.	£ s. d.		£ s. d.		21-cwts.	£ s. d.		£ s. d.
1860..	180,448	1,079,403 4 6	64	133 18 0	1870..	90,227	374,612 0 6	7	98 12 0
1861..	176,097	1,013,400 5 6	64	130 1 0	1871..	74,367	292,122 4 6	64	99 11 0
1862..	186,662	977,017 2 6	62	127 13 0	1872..	67,542	316,213 1 9	64	114 17 0
1863..	176,285	872,474 4 6	64	120 9 0	1873..	61,715	271,086 10 0	64	110 5 0
1864..	166,707	858,586 1 0	62	124 17 0	1874..	51,327	218,218 8 6	76	97 16 0
1865..	164,940	806,833 10 0	64	125 3 0	1875..	47,856	239,150 14 0	7	110 0 0
1866..	148,777	678,641 3 0	64	118 7 0	1876..	37,173	177,630 18 6	62	113 8 0
1867..	125,679	547,689 8 6	64	107 1 0	1877..	54,009	230,354 4 6	62	103 3 0
1868..	121,815	554,029 19 0	64	110 15 0	1878..	51,447	187,340 18 6	7	90 15 6
1869..	103,199	430,749 10 6	62	103 3 0	1879..	44,788	148,157 8 0	7	98 14 0

Under separate cover I beg to transmit a copy of the "Mineral Statistics of the United Kingdom of Great Britain and Ireland for the year 1877," by Robert Hunt, F. R. S., keeper of mining records, London. I hope shortly to be enabled to forward a copy of the same work for the year 1878, and trust that the information to be found therein will not be without interest.

#### THE PILCHARD FISHERY.

This fishery has been more or less unsuccessful for the last five years past. The quantity exported in 1878-79 was only 10,309 hogsheads. Although this quantity was much below the average it showed a small increase on the export of 1877-78, which only amounted to 9,477 hogsheads.

The following extract from a circular issued by Messrs. G. C. Fox & Co., of this town, shows the prices realized for the fish cured last season and the ports to which they were sent:

FALMOUTH, April 24, 1879.

We beg to furnish herewith statistics showing what pilchards were exported last season and during previous years.

For five consecutive seasons the fishery has not been very productive; the total quantity exported for 1878 being only 10,309 hogsheads, of which rather more than one-half was taken by seines.

These fish were generally not large, and the quality varied according to the amount of care shown in preparing them for shipment.

There was not an active demand at the beginning of the season, and prices ruled low, ranging from from 30s. to 36s. per hogshead to the curers. For the later catches 60s. was given, owing partly to the Spanish fishery being deficient.

#### Pilchard shipments, 1878.

Vessel.	Quantity.	Loading port.	Date of sailing.	Genoa.	Leghorn.	Naples.	Bari.	Ancona.	Venice.
	<i>Hhds.</i>		1878.						
Via Liverpool	183	Penzance	Sept. 28	93		70			
Do	66	do	Oct. 10	26	15	25			
Steamer Adria	500½	do	Oct. 11	400		100½			
Steamer Justitia	282	do	Oct. 18	228		54			
Via Liverpool	10	Falmouth	Oct. 18						
Do	92	Penzance	Oct. 22						10
Steamer Aurora	411½	do	Nov. 2	382½		48			92
Steamer Northumbria	982	do	Nov. 26	817	45	120			
Via Liverpool	90	Falmouth	Dec. 3						
Steamer Italia	564½	Penzance	Dec. 6	504½					90
Steamer Richard Trevithick	1,192½	Hayle	Dec. 9			655	537½		
Via Liverpool	30	Falmouth	Dec. 9						30
Steamer Rosebud	1,460	St. Ives	Dec. 8	1,460					
Steamer Justitia	582	Penzance	Dec. 27	383	49	150			
Via Liverpool	25	Falmouth	Dec. 30						25
			1879.						
Steamer Aurora	572½	Penzance	Jan. 4	462½	60	50			
Steamer Denia	1,171	do	Jan. 12	1,171					
Via Liverpool	55	Falmouth	Jan. 13					30	25
Steamer Europa	497	Penzance	Jan. 18	445	52				
Steamer Minerva	748	do	Jan. 28	647		96			
Steamer Adria	819½	do	Feb. 15	819½					
Totals	10,309			7,880	221	1,368½	537½	30	272

Under a separate cover I forward a copy of the report of the Royal Cornwall Polytechnic Society, which (pages 73 to 119) contains an exhaustive paper written by myself, entitled "Observations on the History and Statistics of the Pilchard Fishery," from an ancient period to the year 1878.

## THE HARVEST.

The year 1879 has, so far, been one of the wettest ever known in England, and the cereal crops have suffered much. Wheat, particularly, is very deficient in quantity, and the grain very small.

## NAVIGATION.

Following is a tabular statement showing the number and aggregate tonnage of the vessels which arrived at Falmouth, for orders or otherwise, during the year 1878, not including coasters or vessels of war:

Flag.	No. of vessels.	Registered tonnage.
		<i>Tons.</i>
British .....	1, 832	746, 262
Italian .....	522	155, 929
German .....	360	122, 200
Norwegian .....	198	82, 270
Swedish .....	108	46, 066
Danish .....	105	24, 669
French .....	94	45, 099
Austrian .....	70	81, 449
Dutch .....	76	19, 258
American .....	64	62, 257
Spanish .....	44	12, 350
Greek .....	28	11, 955
Belgian .....	16	12, 754
Russian .....	12	7, 542
Portuguese .....	1	120
Honolulu .....	1	660
Chilian .....	1	808
Nicaraguan .....	1	833
Mexican .....	1	225
Ottoman .....	1	300
Total .....	2, 835	1, 380, 574

In 1877 the number of such vessels was 3,489, having an aggregate tonnage of 1,461,763, the falling off being due, in great measure, to the late war between Russia and Turkey, which had the effect of stopping for a time the shipments of grain from the Black Sea ports, a very large proportion of which came to Falmouth for orders. The number of American vessels which visited this port in 1877 was 55, with an aggregate tonnage of 45,820, whereas in 1878 (as per above tabular statement) the number of such vessels was 64, with an aggregate tonnage of 62,257.

## THE HUMIDITY OF THE AIR.

The annual report of the Royal Cornwall Polytechnic Society for the year 1878, to which I have already had occasion to refer (a copy of which as before mentioned I transmit under separate cover), contains meteorological charts and tables for that year, and a large amount of meteorological information, the result of most careful observations taken at Falmouth and other towns in this county. The particulars respecting the humidity of the air—asked for in the Department's circular, dated April 2, 1879—will be found therein. This is the only form in which the information desired upon this subject can be obtained, without incurring some considerable expense.

## EXPORTS TO THE UNITED STATES.

The exports to the United States from this part of England still continue to be confined to a small number of articles. The following return

shows that the declared value of such exports from my consular district during the year ending this day amounts to \$67,253.47 as against \$55,036.64 in 1878.

*Statement showing the value of declared exports from the consular district of Falmouth to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Arsenic .....	\$7,789.82	\$5,998.82	\$3,304.48	\$670.52	\$17,763.64
China clay .....	7,518.11	6,324.60	15,405.97	18,525.14	47,773.82
Miners' caps .....	170.32		338.21	233.59	742.12
Bricks .....		133.82		840.07	973.89
Total in United States gold.	15,478.25	12,457.24	19,048.66	20,269.32	67,253.47
Total for preceding year ..	13,318.05	16,419.88	12,485.27	12,813.44	55,036.64
Increase .....	2,160.20		6,563.39	7,455.88	12,216.83
Decrease .....		3,962.64			

The above statement shows a considerable increase in the value of China clay and arsenic exported. No bricks were exported for the four previous years.

HOWARD FOX.

UNITED STATES CONSULATE,  
Falmouth, September 30, 1879.

## GLOUCESTER.

*Report, by Commercial Agent Farrell, on the trade relations of Gloucester with the United States, and on the general commerce of the port.*

### THE PORT OF GLOUCESTER.

With more than ordinary diligence and concentration of purpose, I have endeavored to lay before the Department a thorough and concise picture in figures of the exact status of the port of Gloucester in its relationship to the commerce of the world, and in an especial manner upon its bearings on the United States.

The port of Gloucester, being the most inland port in the kingdom, is most admirably situated for trade with the interior, lying 16 miles above Sharpness Point, at the estuary of the river Severn, and it is approached by a ship-canal 86 feet wide and 18 feet deep, navigable for vessels drawing 15 feet of water. Its docks are commodious and closely connected with a net-work of railroad in addition to its canal and river navigation, thus affording unusual facilities for the transportation of merchandise to the midland country and South Wales. The commerce of the United Kingdom has of late years been developed through the agency of large iron-built sailing vessels and steamships, all of a larger tonnage than had previously been employed in the Bristol Channel; and to meet the requirements of such vessels, as well as to preserve and increase the trade of this port, dock accommodations upon a commensurate scale have been constructed near Sharpness Point, and are now known as the "Sharpness New Docks," where steamships and sailing vessels of large tonnage can enter with ease and safety.

Steamships of 2,000 tons burden have already entered there with safety, and still larger vessels can be safely accommodated. The following shows the dimensions of the docks in question, viz: length, 546 feet; width of entrance, 60 feet; mean spring tides rise on sill 29 feet, neap tide, 16 feet; width, 60 feet; depth of water upon upper sill, 24 feet. Floating dock: length, 2,220 feet; depth of water, 24 feet. Graving dock, length of same, 350 feet; width of entrance, 50 feet; depth of water over sill, 15 feet. The "Severn Railway Bridge," lately constructed, which crosses the estuary of the Severn on 26 arches, connecting the "Sharpness New Dock" with the Severn and Wye and Great Western Railways, on the Monmouthshire side, create for this port direct and near connection with the coal-fields of South Wales.

The exports of Gloucester are almost entirely confined to articles of salt, pitch, new and second-hand railroad rails, and other supplies of similar character; and it is expected that in the near future this port will divide the trade of Cardiff, Newport, &c., in the matter of coal shipments. All the cloth which goes to the States from the neighborhood of Stroud and its surroundings, and certified to from this office, is invariably shipped via Liverpool, London, and Bristol steamers.

The general depression of the trade of the United Kingdom has hitherto affected this section the least of any, from the fact of its being a city of the sea, embedded in the richest of agricultural valleys; but the very unfortunate visitation—the "epidemic on sheep," as named in my last dispatch to the Department—augurs a financial collapse of the farmers, and all trade interests connected therewith, and promises to the States a rich harvest in emigration from the hitherto solid grand old yeomanry, so historically famous for their high education in the arts of husbandry and sheep and cattle raising.

To borrow the words of the Hon. Adam Badeau, consul-general at London, in his recently published annual report, "it might be worth the considering by the separate State governments whether any steps could be legitimately and successfully taken to invite so desirable a class and to facilitate their passage to America, or reception on their arrival."

The one painful item in the report and statistics as now submitted is the almost "wiping out" of the carrying trade of the American flag—dwindling down from 12 arrivals at this port in 1878 to the number of 4 last year.

*List of vessels from foreign ports.*

Nationality.	1878.		1879.	
	Number.	Tonnage.	Number.	Tonnage.
Austrian .....	21	11,040	23	12,169
British .....	216	110,722	220	112,692
Danish .....	11	2,560	16	2,726
Dutch .....	22	3,522	23	3,536
French .....	47	4,908	36	3,769
German .....	62	18,475	55	18,664
Greek .....	3	1,369	2	619
Italian .....	65	31,671	56	30,660
Norwegian .....	119	53,797	113	52,489
Russian .....	15	6,744	10	4,191
Spanish .....	1	715	1	279
Swedish .....	20	8,308	20	8,128
United States .....	12	6,584	4	4,494

*Imports of timber and deals received at this port.*—Number of tons received, registered at custom-house in 1878, 75,089; in 1879, 76,276.

For the following average receipts and statistics of prices ruling the grain market of Gloucester I am indebted to the eminent firm of I. & C. Sturge, of Birmingham and Gloucester, whose reputation extends from the past century :

*Imports and average price of grain, &c., at this port for 1878 and 1879.*

	1878.		1879.	
	Quantity.	Average price.	Quantity.	Average price.
	<i>Quarters.</i>		<i>Quarters.</i>	
Wheat.....	495,555	46s. per 496 pounds.	572,247	48s. 6d. American.
Barley.....	262,130	25s. 6d. per 400 pounds.	70,638	22s. 11d. grinding.
Oats.....	121,814	23s. 6d. per 312 pounds.	93,390	28s. Dutch oats.
Beans.....	21,803	36s. per 480 pounds.	14,396	35s. 4d. Egyptian.
Pease.....	32,200	35s. per 504 pounds.	8,066	35s. 10d.
Maize.....	339,455	26s. 6d. per 480 pounds.	319,951	24s. 8d. American.
Linseed.....	34,000	49s. per 480 pounds.	*34,400	52s. 6d. Black Sea.

\* Per 416 pounds.

*Average scale of wages, 1878.*

	s.	d.
Agricultural laborers.....per week..	16	
Dock laborers.....do.....	20	
Dock porters (corn).....do.....	30	
Engineers.....per day..	10	
Carvers, gilders, sculptors, &c.....do.....	10	
Ship carpenters.....per hour..	6	to 7½
House carpenters.....do.....	6	to 7
House painters.....do.....	5	to 6
Blacksmiths, masons, &c., per day.....	5	

The same rates prevail for 1879.

Tenement rental is cheap, scarcely ever exceeding 3 per cent. to the owners, and the opening of American food-supply stores in this city and at Cheltenham has kept the price of our imported beef at 7d. to 8d. per pound. Ham, 7d. to 8d. per pound. Bacon, 5d. to 6½d., but the working classes have the past year felt the great pressure, in the advance of their daily staple food, viz, bread and cheese; the former having advanced from 5d. for 4 pound loaf in 1878, to 6½d. and 8d., and the latter from 4d. and 5d. to 7d. and 8d. in the year 1879.

*Export of salt from this port.*

[From John Corbett's Stoke Prior Salt Works, Worcestershire.]

Whither.	Quantity in 1878.	Quantity in 1879.
	<i>Tons.</i>	<i>Tons.</i>
Belgium.....	7,414	7,286
France.....	3,618	4,466
Ireland.....	5,627	5,194
Germany.....	7,952	8,187
Newfoundland.....	89	
Russia.....	1,071	
India.....	3,620	3,753
Finland.....		630
Norway.....		205
United States.....	10,799	16,085
Total.....	40,190	45,808



*Exports of salt from this port.*

[From sundry merchants.]

Whither.	Quantity in 1878.	Quantity in 1879.
	<i>Tons.</i>	<i>Tons.</i>
Belgium .....	1, 017	276
France .....	224	644
Ireland .....	4, 027	3, 358
Germany .....	3, 612	6, 622
Russia .....	1, 327	3, 071
Norway .....	236	660
Denmark .....	898	421
United States .....	897	3, 557
Total .....	12, 238	18, 698

JNO. FARRELL.

UNITED STATES COMMERCIAL AGENCY,  
*Gloucester, February 24, 1880.*

## HARTLEPOOL.

*Report, by Consular Agent Nilsen, on the trade of Hartlepool with the United States for the year ending September 30, 1879.*

The trade between the United States and this port and neighborhood has increased considerably during the last twelve months. By regular bi-monthly local steamers about £188,000 worth of American goods have been imported here, consisting chiefly of maize, wheat, cheese, bacon, ham, lard, flour, cattle, sheep, and hogs. The return cargoes with the same boats have hitherto only consisted of small parcels of coals, shipped at low freights, but still the result has not been encouraging to the shipper, or remunerative to the ships; for, in consequence of the import duty levied upon this article, all profits of the voyage must come out of the return cargo, and many vessels have preferred going out in ballast rather than handle coals under existing circumstances.

From the Tees considerable quantities of pig iron and rails have lately been shipped for New York, Philadelphia, Baltimore, and Boston, and several large iron orders are still in the market, but the invoices of nearly all these iron shipments from my district have been certified and passed in Glasgow and Liverpool.

There have been no United States vessels here during the last twelve months.

The local trade, consisting principally of iron manufactures and iron ship building, has suffered considerably by the general slackness of trade. One ship-building firm here turned out last year 28,200 tons of new iron ships (the largest quantity by any one firm in the United Kingdom), but the same firm will only finish 19,000 tons this year, and smaller firms in the same proportion.

C. NILSEN.

UNITED STATES CONSULAR AGENCY,  
*Hartlepool, October 4, 1879.*

## HULL.

*Report, by Commercial Agent Driggs, on the commerce, industries, and agriculture of the district of Hull for the year ending September 30, 1879.*

In submitting this my first annual report, for the year ending September 30, 1879, I may be permitted to preface it with the remark that I fully realize the disadvantages under which I am placed, owing to my having no previous report for reference as a precedent for my guidance. If, therefore, my report lays me open either to the charge of redundancy on the one hand or scantiness on the other, I trust such imperfections will be pardoned.

The establishment of this commercial agency was effected on my assumption of the functions thereof on the 17th February last. Prior to that date the duties of this office devolved upon a consular agent who was immediately under the supervision of the consul at Leeds.

## HISTORICAL. .

Hull, or "Kingston upon Hull," is a borough and sea-port in East Yorkshire, on the north of the river Humber; railway distance from London being 175 miles north.

The ancient name of the place was Wycke, but in 1299 Edward the First made certain grants and privileges, and gave it the appellation of "Kingston upon Hull," the population then numbering about 2,000.

Comparatively little progress was made in its development in a maritime point of view until 1778, when the first dock was opened on the site of the old fortifications, and it was then declared as the third port in the kingdom, being only surpassed by London and Liverpool.

Gradually and steadily progressing, another dock, called the Humber dock, was opened in 1809, and the Prince's dock in 1829. Subsequently the Victoria dock, and in 1876 the Railway dock, followed by the Albert dock in 1869, which has recently been considerably enlarged. These docks, taken together, cover an area of about 95 acres. At the west end of the Albert dock another dock is in course of construction, which, when completed, is contemplated to cover an area of 22½ acres.

Much inconvenience has for many years been experienced in Hull owing to the want of a better graving-dock accommodation. To meet this requirement the Hull Dock Company, at a considerable expense, are now constructing a graving dock capable of accommodating vessels of the largest dimensions.

Previous to 1778 the shipping lay in the narrow channel known as the Old Harbor, which is the mouth of the River Hull. The development, therefore, in Hull of accommodation for ships of all sizes belongs exclusively to the last century of its history.

## POPULATION.

Concomitantly with the increased facilities for commerce, it will be seen from the following statistics that the inhabitants have rapidly increased :

In 1767 the inhabitants numbered.....	12,964
In 1777.....	15,678
In 1792.....	22,286

In 1801 the inhabitants numbered.....	29, 849
In 1811.....	37, 466
In 1821.....	41, 420
In 1831.....	56, 761
In 1841.....	69, 670
In 1851.....	84, 690
In 1861.....	98, 994
In 1871.....	124, 120
In 1878.....	(estimated) 146, 347

## SHIPPING.

From the convenience of the position of this town in relation to the shipping ports on the continent of Europe, Hull has gradually developed its maritime resources, and with its increased and still increasing dock accommodation, facilities are afforded for a corresponding increase in the shipping business.

The present year has, however, been marked with considerable falling off in the imports and exports, which has tended to increase the spirit of competition among the ship-owners, consequently freights to all parts have never before been known to fall so low.

According to the annual report of the Hull Chamber of Commerce last year the steamers belonging to the port numbered 173, the aggregate net tonnage of which amounted to 147,689 tons. Of these steamers about two-thirds are under 1,000 tons net, and the remaining third over 1,000 tons and under 2,000 tons net.

A large number ply to the Baltic ports, viz: Cronstadt, Riga, Revel, Stockholm, Helsingfors, Wyburg, Danzig, Königsberg, and Copenhagen. A considerable number are also employed in trading to the North Sea and British Channel, viz: Hamburg, Bremen, Antwerp, Rotterdam, Amsterdam, Harlingen, Dunkerque, Havre, Rouen, Bordeaux, and to the northern ports of Drontheim, Bergen, Stavanger, Christiansand, Christiania, and Gothenburg; others to the Mediterranean, the Black Sea, and Sea of Azoff.

There are also coasting steamers running regularly to London, Yarmouth, Ipswich, and Newcastle; also to the Scotch ports of Leith, Dundee, Aberdeen, and Grangemouth.

The registered tonnage of steamers and sailing vessels belonging to Hull, taken together, is as follows:

Years.	Number of vessels.	Number of tons.	Years.	Number of vessels.	Number of tons.
1860.....	599	104, 804	1874.....	740	175, 591
1870.....	644	131, 028	1875.....	743	185, 896
1871.....	673	158, 672	1876.....	755	199, 551
1872.....	700	173, 194	1877.....	799	172, 359
1873.....	725	175, 072	1878.....	830	181, 399

## RAILWAYS.

The first railway out of Hull was the Hull and Selby line, opened in 1840. Isolated for a time, it soon became attached to the general network of railways then rapidly extending over the kingdom.

Eight years later a new line was constructed from New Holland (on the south side of the Humber), thus placing Hull in more direct connection with Lincolnshire and the southern counties, at the same time affording a choice of two routes to the principal manufacturing centers

of England; but the merchants and ship-owners of Hull still feel the need of further railway facilities, and are at the present time making vigorous efforts for a new railway from Hull to Barnsley, so as better to secure their interests against the competition of other ports.

There are also two short lines constructed for the accommodation of passengers to Withernsea and Hornsea, two watering places on the German Ocean.

#### AVERAGE HEALTH AND DEATH RATE.

The health of the town is generally considered at the present time to be satisfactory. During the past spring and summer seasons the winds have been unusually harsh and chilling, and the rain has fallen almost incessantly. The climate, under the most favorable circumstances, is subject to sudden variation of temperature; and, when these unfavorable circumstances are taken into consideration, it is rather surprising to find that they have not been productive of increasing sickness and death.

The death rate, however, averages only 26 per 1,000. Forty years ago the average was 40 per 1,000. The decrease may be ascribed to the successful working of the sanitary measures carried out by the local board of health.

#### THE TOWN AND SUBURBS.

The town presents different aspects according to the points from which it is viewed. Its leading commercial street, called High street, is about a mile in length, and is so narrow as barely to admit of two vehicles passing. It was formerly what its name implies, "the chief street of the town." Indeed, the interior of many of the old houses, with their antique paneled rooms, and frescoed ceilings, sufficiently testify to having been at one time the residences of the wealthy. These are now chiefly occupied as merchant's offices, and in the rear gloomy warehouses cover the spots formerly laid out as gardens.

The town is intersected with its own docks crossed by wide bridges. They are frequently opened for the passage of vessels from one dock to another to the serious interruption of the street traffic.

At the south end of the town, facing the river Humber, is a large T pier erected in 1847, which, in fine weather, is a favorite attraction; the view of the river studded with steamers and sailing vessels forms a very lively and agreeable picture.

#### PUBLIC BUILDINGS.

The town hall is a handsome building in the Italian style of architecture, but being in a low neighborhood the effect is, to some extent, marred by its miserable surroundings.

The royal institution, in Albion street, was built in 1853, in the Corinthian style, has a lecture-hall and museum, and accommodates under its roof the Hull subscription library, containing about 40,000 volumes.

Several handsome buildings have been recently erected in various parts of the town. The chaste block of buildings belonging to the dock company, several banks, and the general post-office, are worthy of notice.

#### TOWN IMPROVEMENTS.

Considerable spirit has been evinced of late years to effect an improvement in the arterial thoroughfares, particularly those leading to the better class residences on the outskirts of the town.

The main approaches to the town from the suburbs have been greatly improved by the planting of ornamental trees, which naturally form attractive features to the place; nor should notice of its pretty little park be omitted, around which elegant detached villas have been erected.

#### THE RIVER HUMBER.

Tradition ascribes its derivation to the circumstance of a king named Humber having been drowned in the river. Others trace its nomenclature to a French word signifying muddy or cloudy.

This noble river is among the largest in England, and may be said to resemble the trunk of a vast tree, spreading out its branches in every direction. It commands, by the numerous rivers which it receives, the navigation and trade of a very extensive and commercial part of England.

It divides the East Riding of Yorkshire from Lincolnshire during the whole of its course, and is formed by a junction of the rivers Ouse and Trent.

The width of the river from Hull to the Lincolnshire side of the Humber, is between two and three miles, but a few miles below Hull the river widens considerably, say six or seven miles from bank to bank. It directs its course past Grimsby to the German Ocean, which it enters at Spurn Head, a distance of 20 miles from Hull.

It is interesting to note that while extensive accretions of new land are continually going on, no changes of a sudden character take place in the channels and mud banks below the town. There is, therefore, at all times an efficient navigable channel from the town to the ocean, so that the very largest class of ships can enter or depart, night or day, dark or light, without any damage, with the exception of such as is common to all navigation.

A good feature in the Humber is its freedom from that destructive insect called the teredo, which makes such ravages in the timber and dock works and ships, and which is found particularly active in the ports of Liverpool, Bristol, Southampton, Portsmouth, Sheerness, and many other places.

The Humber between its banks occupies an area of about 125 square miles.

#### STEAM COMMUNICATION WITH THE UNITED STATES.

The organization of a regular line of steamships between this port and New York and Boston, in 1877, effected by the enterprising firm of Messrs. Thomas Wilson, Sons & Co., of Hull, is considered a valuable acquisition to the trade of this port, and is an encouraging omen for the future welfare and prosperity of its people, as it has not only been the means of opening out direct communication with the United States, but has largely increased the imports of both manufactured and unmanufactured American products. This energetic firm owns upwards of fifty steamships, which ply regularly between ports in the Baltic and Mediterranean, bringing in the produce from maritime trading districts for reshipment by their own steamers to the United States; and the same facility is afforded for dispatch of the return cargoes from the United States, likewise reshipped here at the company's wharf for ports in the East.

Messrs. Wilson dispatch a steamer weekly to New York, and fortnightly to Boston.

The articles chiefly imported from America are wheat, maize, beans, clover-seed, and flour; bacon, hams, pork, beef, lard, cheese, sugar, tallow, leather, hardware, wood goods, &c.

The exports to America are principally pig-iron, steel, hardware, flax, tow, wool, hair and rags, alum, alkali, bleaching powder, colors, chemicals, glassware, and manufactured goods.

#### EMIGRATION.

The emigration from Hull direct to America is on a small scale, but there is a constant influx of emigrants from Germany and the Baltic ports, on their way per rail to Liverpool, their ultimate destination being America.

#### QUARANTINE.

The only quarantine existing at present at this port is 48 hours on vessels arriving from Russian ports, owing to the prevalence of the plague in that country.

#### HULL CUSTOMS REVENUE.

The customs revenue was as follows for the year ending—

December 31, 1874 .....	£196,081	\$941,188 80
1875 .....	178,598	857,270 40
1876 .....	177,115	850,152 00
1877 .....	166,303	798,254 40
1878 .....	160,327	769,569, 60

#### FISHING VESSELS.

There are upwards of 400 deep-sea fishing boats, of an average of 67 tons each, belonging to the port of Hull, which give employment to about 2,000 hands.

The produce finds its way per rail to the London and other markets, and materially contributes to the prosperity of the town.

The whale and seal fisheries were formerly important branches of industry, but have declined of late years.

#### TRADE AND MANUFACTURES.

Hull, independent of its position as a maritime port, is also to some extent a seat of manufactories of various kinds.

Among the principal mills are those employed for seed-crushing and cotton-spinning, also for the production of blue, blacklead, paints, and varnish; there are also some tar distilleries.

*Seed-crushing.*—The first of the local industries that demands notice is the business of converting seed into cakes and their concomitant product, oil. For a long period this town was famous for the production of these articles, but never for thirty years has this important business been in so stagnant a condition as at the present time.

*Linseed oil,* both for home consumption and export, has been in such small demand that the greater portion of the mills have entirely ceased to run, the proprietors having sunk under the heavy losses occasioned by bad debts and the general depression of trade. The production, therefore, has fallen considerably short of former years.

*Linseed and other feeding cakes* have been in small demand, owing to

the poverty of the farmers, who, in order to economize, have in many instances discontinued the use of cake, and almost exclusively relied on their own productions.

*Linseed.*—The falling off in the crushing trade has naturally been accompanied with a corresponding decrease in the quantity of linseed imported.

*Cotton-seed oil.*—The manufacture of this article is, and has been, growing to a considerable extent, the principal portion of which is exported to the continent of Europe.

*Paints and colors.*—There are several extensive works in Hull, but this business has shared with its kindred productions in the prevailing depression. The present prices are said to be lower than they have been known for 40 years, and this diminution in price has had no tendency to relieve the deadness which has prevailed during the past three years. The manufacturers have, therefore, as a rule, employed a smaller number of hands and also resorted to short hours, in many cases working for stock, hoping with the low price of raw materials, to escape from ultimate loss.

*Shipbuilding* was, up to a very recent period, a flourishing branch of trade, employing a large number of hands, but is now almost at a standstill.

*Flax and cotton spinning.*—It is questionable whether this branch of business has ever been carried on profitably in Hull. Several fine mills have been razed to the ground, others destroyed by fire which have not been rebuilt. Comparatively little is doing at the present time in the manufacture of either flax or cotton.

*The timber trade.*—Owing to the facilities of transport from the North Sea and Baltic ports, Hull naturally forms an intermediate center from which to supply the wants of the northern and midland counties of England. The Baltic timber trade, therefore, forms one of the leading features of the commerce of the town, which, for many years, yielded a lucrative business, but in consequence of the general stagnation, more especially in the building trade, the timber merchants at this moment are holders of very heavy stocks, on which, judging from the present position of affairs, a considerable loss will be ultimately sustained.

*Tar.*—The importation of this article is considerably less than for several years past. Old stocks left over from last year have tended to lessen the value. The demand being so small, holders have submitted to a gradual diminution in the price. The present price for Archangel is 12s., or \$2.88, per barrel, and Stockholm 15s., or \$3.60, to 15s. 6d., or \$3.72, per barrel.

There has been a gradual reduction in price for the past three or four years, say from 30s., or \$7.20, per barrel downwards.

*Rosin and turpentine.*—The importation of these articles compares favorably with past years, there being a slight increase; this has been effected by the Hull merchants importing cargoes direct from Wilmington and Charleston, whereas formerly supplies were furnished mainly through London and Liverpool. Prices have ruled low for the past two years. Rosin, common strained, is worth 4s., or 96 cents, to 4s. 3d., or \$1.04, per cwt.; medium, 6s. 6d., or \$1.56, to 7s., or \$1.68.

Spirits turpentine have fluctuated little during the year, 22s., or \$5.28, to 22s. 6d., or \$5.40; being about the average price.

*Petroleum.*—The importation of this article is considerably less than last year; it is mainly from New York. Prices have fluctuated but little; 7½d., or 15 cents, to 8d., or 16 cents, per gallon has been about the average price.

## MINES.

There are no mines in Hull or the neighborhood, as the district for many miles round is laid on the chalk formation. Hull is, however, the natural outlet of the extensive coal mines of Yorkshire, Nottinghamshire, and Derbyshire, covering an area of over 1,000 square miles, and is in connection by rail and canal with about 150 leading collieries, producing three descriptions of first class coal.

The exports from Hull for the year 1877 amounted to 473,588 tons; for the year 1878 487,512 tons.

## AGRICULTURE.

For several years circumstances have conspired against farming interests. In this neighborhood it is not only the bad prospects of the present harvest, or the losses of last season, but the farmers are suffering under the combined effects of four exceptionally bad years.

Although the land around this district has not suffered directly from floods, like many other localities, nevertheless, owing to the incessant rain and cold of last spring, the water, having lodged on the land, has in many instances caused the grain to perish without germinating.

*Wheat.*—The wheat sown a second time (now being cut) is deficient in quantity, and is defective both in development and quality, the ears being very small and short, and in many cases shriveled and valueless.

*Oats, barley, &c.*, are also very unsatisfactory in yield and flavor, and in almost every field large patches are to be seen of a white or sickly yellow, deprived of the elements of nutrition, and the heads are also very small and short in common with other cereals.

*Beans and pease* are also very small and scanty in yield.

*Hay.*—The hay has also suffered to a large extent from the rain, and under the most favorable circumstances is much deteriorated, but it is stated that in some instances the damage has been so great as to render it absolutely worthless, and it has been allowed to rot in the fields, or removed to the manure heap. The aggregate loss, therefore, on hay is very considerable, both as respects quantity and quality.

*Potatoes*, from all accounts, have yielded about an average, but in this neighborhood the loss occasioned by disease is very considerable.

*General view of the question.*—The combined effects of these misfortunes have been very marked and telling against the interests of the cultivators of the soil, and notwithstanding the consent on the part of the English land-owners to a return of from 10 to 30 per cent. on the rent, the losses have been so great as to have almost if not absolutely ruined a large number of farmers.

From all that can be ascertained, the causes of these calamities may be summed up under three general heads.

*First.*—A succession of bad seasons.

*Secondly.*—The keenness of foreign competition.

*Thirdly.*—The high rents which in many instances have more than swallowed the year's profit.

It has been estimated by those who have studied the matter that the product of cereals this year will be deficient about 25 per cent., which rendered into English money value reaches £60,000,000, or in American money \$291,990,000; others are disposed to take a still more gloomy view, and to consider the loss as reaching nearly £100,000,000, or, in American money, \$486,650,000.



## AVERAGE WAGES AND COST OF LIVING.

The manufacturers, traders, and agriculturists, alluded to under these several heads, have naturally reflected a corresponding depression on the artisan, both as regards the price of wages and the scarcity of labor.

The average price per day paid for ordinary laborers is 3s. 6d. or 84 cents; agricultural laborers receive 2s. 6d., or 60 cents; artisans 4s. 6d., or \$1.08, to 6s. 6d., or \$1.56, per day.

The cost of living to the working classes averages 2s., or 48 cents, per day, being a decrease of 6d., or 12 cents, per day since 1874.

## FOREIGN CONSULAR REPRESENTATION AT HULL.

The following countries are represented by consular officers at this port, viz: Argentine Republic, Belgium, Brazil, Chili, Costa Rica, Denmark, Ecuador, France, Germany, Greece, Hawaiian Islands, Honduras, Italy, Liberia, Netherlands, Peru, Portugal, Russia, Spain, Sweden and Norway, Turkey, Uruguay, and the United States of America.

## SUMMARY OF THE BUSINESS OF THIS CONSULATE DURING THE PAST YEAR.

The total number of American vessels arrived at this port during the past year was 14, with an aggregate tonnage of 14,277 tons, the cargoes of which consisted of the following, viz: Soda, 1,186 tons; bark, 454 tons; sleepers, 1,169 loads; pease, 490 tons; dried fish, 1,282 tons, and wheat, 9,696 tons; the aggregate value of which being \$772,393.

GEO. W. DRIGGS.

UNITED STATES COMMERCIAL AGENCY,  
*Hull, September 30, 1879.*

*Statement showing the imports at Hull for the year ending September 30, 1879.*

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Animals, living:</b>				
Oxen and bulls.....number..	899	No returns	Nil .....	Principally France, Germany, and Russia.
Cows.....do....	404	..do .....	..do .....	Do.
Calves.....do....	6,698	..do .....	..do .....	Do.
Sheep and lambs.....do....	19,472	..do .....	..do .....	Do.
Swine.....do....	1,025	..do .....	..do .....	Do.
Bark for tanners' use.....tons..	2,401	..do .....	..do .....	Holland and Australia.
Bones of cattle, &c.....do....	6,191	..do .....	..do .....	Continent of Europe and South America.
<b>Corn:</b>				
Wheat.....cwt....	4,160,188	..do .....	..do .....	Principally United States.
Barley.....do....	2,075,060	..do .....	..do .....	Continent and West Indies and America.
Oats.....do....	887,266	..do .....	..do .....	Do.
Rye.....do....	436	..do .....	..do .....	Do.
Pease.....do....	69,172	..do .....	..do .....	Do.
Beans.....do....	342,769	..do .....	..do .....	Do.
Indian corn.....do....	1,487,654	..do .....	..do .....	Do.
Wheat flour.....do....	123,349	..do .....	..do .....	West Indies and United States.
Cotton and wool.....pounds..	8,521,744	..do .....	..do .....	Do.
Flax.....cwt....	167,410	..do .....	..do .....	Russia.
Hemp.....do....	204,795	..do .....	..do .....	Russia principally.

Statement showing the imports at Hull, &amp;c.—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Hides:</b>				
Dry.....cwt..	18,371	No returns	Nil	Continent.
Wet.....do	17,507	do	do	Do.
Dressed.....pounds..	4,896	do	do	Do.
Iron bars, unwrought.....tons..	30,980	do	do	Sweden.
Madder.....cwt..	3,206	do	do	Ports in the Mediter- ranean.
<b>Oil:</b>				
Olive.....tuns..	5,893	do	do	Do.
Seed.....do	4,280	do	do	Do.
Turpentine.....cwt..	25,149	do	do	North America.
Oil-seed cake.....tons..	6,476	do	do	United States, Baltic, and Holland.
<b>Provisions:</b>				
Bacon.....cwt..	167,628	do	do	United States.
Beef, salted.....do	1,116	do	do	United States and Ire- land.
Butter.....do	71,672	do	do	Do.
Cheese.....do	27,427	do	do	Do.
Hams.....do	18,896	do	do	Do.
Pork, salted.....do	1,371	do	do	Do.
Potatoes.....do	697,817	do	do	Germany.
Rice.....do	11,479	do	do	East India.
Rags, woolen.....pounds..	35,123,200	do	do	Principally Russia.
<b>Seeds:</b>				
Clover and grass.....cwt..	39,884	do	do	France and United States.
Flax and linseed.....quarts..	610,306	do	do	Russia.
Rape-seed.....do	52,346	do	do	Baltic provinces.
Tares and lentils.....gallons..	40,420	do	do	Alexandria.
<b>Spirits:</b>				
Brandy.....do	76,164	do	\$190,440 00	France.
Geneva.....do	3,974	do	9,985 00	Geneva.
Rum.....do	1	do	2 50	Jamaica.
Other sorts.....do	7,196	do	17,995 00	Principally continent.
<b>Wine:</b>				
Red.....do	113,091	do	23,272 00	Portugal, Spain, and France.
White.....do	46,603	do	23,301 00	Do.
Tallow.....cwt..	27,216	do	Nil	Russia.
Tar.....barrels..	19,906	do	do	Do.
Valonia.....tons..	1,986	do	do	Sicily.
<b>Wood:</b>				
Hewn.....loads..	31,252	do	do	Norway, Sweden, Fin- land, and Australia.
Sawn.....do	223,158	do	do	Do.
Staves.....do	3,003	do	do	Do.
Wool, sheep's.....pounds..	10,722,743	do	do	Russia and Australia.
<b>Total</b> .....			289,915 50	

Statement showing the navigation at the port of Hull for the year ending September 30, 1879.

From or to—	ENTERED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
<b>Russia:</b>						
Northern ports.....	139	126,213	147	45,117	286	171,330
Southern ports.....	38	34,096	8	3,675	46	37,771
<b>Sweden</b> .....	98	71,525	173	40,968	271	112,518
<b>Norway</b> .....	800	57,537	149	36,717	229	94,254
<b>Denmark</b> .....	14	4,806	269	24,881	283	29,687
<b>Germany</b> .....	404	242,922	35	7,639	439	250,561
<b>Holland</b> .....	419	182,858	1	62	420	182,920
<b>Belgium</b> .....	108	38,845	19	1,809	127	40,654
<b>France</b> .....	115	32,681	10	1,577	125	34,058
<b>Spain and Portugal</b> .....	55	89,166	17	2,891	72	42,656
<b>Italy</b> .....			22	3,105	22	3,106
<b>Austrian territories</b> .....	13	14,542			13	14,542

*Statement showing the navigation at the port of Hull, &c.—Continued.*

From or to—	ENTERED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Turkish dominions .....	4	2,218	9	2,406	13	4,624
United States .....	34	55,921	126	90,273	160	146,194
Mexico and Foreign West Indies .....	.....	.....	3	718	3	718
Central and South America .....	.....	.....	12	7,761	12	7,761
All other countries .....	69	74,441	8	3,014	77	77,455
British possessions:						
Channel Islands .....	3	1,373	4	449	7	1,822
India and Australia .....	.....	.....	17	16,831	17	16,831
British North America .....	1	1,228	9	6,802	10	8,030
British West Indies .....	.....	.....	1	224	1	224
All other ports .....	.....	.....	1	232	1	232
Total .....	1,564	930,371	1,040	296,976	2,604	1,227,347

From or to—	CLEARED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Russia:						
Northern ports .....	174	156,173	53	13,634	227	169,807
Southern ports .....	18	20,855	.....	.....	18	20,855
Sweden .....	95	71,151	90	21,224	185	92,375
Norway .....	81	56,568	55	11,323	136	67,891
Denmark .....	8	2,777	272	36,512	280	39,289
Germany .....	414	247,594	82	17,203	496	264,797
Holland .....	417	132,048	.....	.....	417	132,048
Belgium .....	107	88,948	.....	370	111	39,813
France .....	129	41,219	7	1,787	136	43,006
Spain and Portugal .....	15	14,194	9	1,808	24	16,002
Italy .....	3	2,219	10	8,885	13	6,304
Austrian territories .....	14	15,272	1	313	15	15,586
Turkish dominions .....	1	225	.....	.....	1	225
United States .....	44	83,467	2	967	46	84,436
Mexico and Foreign West Indies .....	.....	.....	.....	.....	.....	.....
Central and South America .....	.....	.....	1	578	1	578
All other countries .....	.....	.....	9	3,632	9	3,632
British possessions:						
Channel Islands .....	.....	.....	3	400	3	400
India and Australia .....	.....	.....	11	16,694	11	16,694
British North America .....	.....	.....	3	2,976	3	2,976
British West Indies .....	.....	.....	1	430	1	430
All other ports .....	.....	.....	5	858	5	858
Total .....	1,520	882,708	618	127,924	2,138	1,010,632

*Statement showing the navigation at the port of Hull, &c.—Continued.*

Flag.	ENTERED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
British.....	1,413	830,366	229	91,784	1,642	922,150
Russian.....	8	762	50	18,728	58	19,488
Sweden.....	27	11,898	66	16,732	93	28,630
Norwegian.....	8	4,796	182	56,885	190	61,681
Danish.....	82	18,571	809	33,209	891	51,780
German.....	99	51,085	134	41,965	233	92,900
Holland.....	.....	.....	16	1,887	16	1,887
French.....	.....	.....	2	209	2	209
Spanish.....	.....	.....	1	874	1	874
Portuguese.....	11	12,259	.....	.....	11	12,259
Italian.....	.....	.....	29	17,380	29	17,380
Austrian.....	.....	.....	8	4,528	8	4,528
Greek.....	.....	.....	1	409	1	409
United States.....	.....	.....	14	14,277	14	14,277
Total.....	1,593	929,687	1,041	297,665	2,634	1,227,352

Flag.	CLEARED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
British.....	1,812	779,300	44	18,689	1,856	798,189
Russian.....	5	1,672	31	9,725	36	11,397
Sweden.....	24	11,318	54	13,012	78	24,330
Norwegian.....	8	747	73	17,241	76	17,988
Danish.....	84	19,187	284	80,552	318	49,739
German.....	181	68,428	105	30,287	286	98,665
Holland.....	.....	.....	12	1,430	12	1,430
French.....	.....	.....	.....	.....	.....	.....
Spanish.....	.....	.....	.....	.....	.....	.....
Portuguese.....	11	12,076	.....	.....	11	12,076
Italian.....	.....	.....	12	5,811	12	5,811
Austrian.....	.....	.....	2	618	2	618
Greek.....	.....	.....	1	409	1	409
United States.....	.....	.....	.....	.....	.....	.....
Total.....	1,520	892,728	618	127,924	2,138	1,020,652

*Statement showing the value of declared exports from Hull to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Ale.....	.....	.....	\$7,574 28	\$2,894 72	\$10,469 00
Antimony.....	.....	.....	2,249 58	.....	2,249 58
Bagging.....	\$780 18	\$1,678 50	398 94	1,288 06	4,069 68
Barley.....	5,282 48	.....	.....	.....	5,282 48
Black lead.....	.....	277 26	.....	.....	277 26
Calfekins.....	.....	.....	.....	3,945 30	3,945 30
Chalk.....	.....	.....	.....	578 48	578 48
Chalkstone.....	194 48	1,096 42	2,327 32	1,401 40	5,019 62
Coal.....	1,289 48	4,297 16	.....	323 71	5,909 35
Onions.....	5,454 90	3,483 76	11,686 86	13,532 12	33,097 64
Cotton and paper.....	.....	.....	2,024 94	.....	2,024 94
Dogs.....	80 24	.....	.....	.....	80 24
Gumac.....	.....	.....	677 56	.....	677 56
Hides.....	.....	.....	568 10	776 38	1,344 48
Iron rails.....	.....	.....	.....	4,682 50	4,682 50

Statement showing the value of declared exports from Hull, &c.—Continued.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Leather		\$295 40	\$328 88		\$624 28
Looking-glasses		115 28			115 28
Old rails				\$12, 185 00	12, 185 00
Old rope				399 46	399 46
Old scrap-iron				3, 555 74	3, 555 74
Oxide of iron		1, 260 48			1, 260 48
Paints	\$2, 988 74	1, 762 00	1, 238 92		5, 989 66
Pale ale	502 48	13, 909 86			14, 412 34
Paris blue			371 28		371 28
Paris white		594 08			594 08
Rope			1, 275 52	763 02	2, 038 54
Salts of tartar				686 86	686 86
Silver	208 40				208 40
Spelter	2, 278 46	1, 084 30	1, 997 54		5, 260 30
Sundries	2, 091 64				2, 091 64
Tables		26 48			26 48
Whiting-stone		580 48			580 48
Winter-dried hemp				704 68	704 68
Total in United States gold	21, 101 48	31, 261 46	32, 619 72	46, 700 43	131, 683 09
Total for preceding year	NIL	NIL	NIL	NIL	NIL
Increase	21, 101 48	31, 261 46	32, 619 72	46, 700 43	121, 683 09

## LEEDS.

Statement showing the value of declared exports from the consular district of Leeds to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Alpaca	\$831 50				\$831 50
Balling-thread			\$63 92		63 92
Bars and bundles iron	2, 047 64	\$2, 120 88	2, 857 12	\$2, 834 14	9, 859 78
Bleached linen damask		2, 693 19			2, 693 19
Books	387 94		419 48	364 56	1, 171 98
Bottles	298 84				298 84
Brown dye		2, 831 91	3, 588 95	1, 186 87	8, 607 73
Brown grease	5, 892 14	2, 862 20	1, 395 38	4, 062 72	14, 212 44
Calf-hair	1, 450 80				1, 450 80
Camel-hair	3, 656 12				3, 656 12
Cattle-hair	1, 228 68				1, 228 68
Casings for sausages		20 80			20 80
Chemicals	19, 120 38	10, 898 89	10, 892 41	17, 601 95	58, 013 63
Chinese goods			163 12	127 50	290 62
Circular combs, &c	560 16	516 44	178 92		1, 255 52
Combs and leathers		280 10			280 10
Comb-ing-leathers	141 52				141 52
Cottons	33, 712 16	9, 530 70	12, 272 62	23, 106 87	78, 622 35
Cottons and woollens			4, 420 29		4, 420 29
Cudbear	698 52				698 52
Cudbear and orchil liquor		3, 309 52			3, 309 52
Cudbear and extract of indigo			4, 526 00		4, 526 00
Dye-stuffs		1, 241 88	795 13	2, 844 60	4, 881 60
Economizer			1, 260 00	1, 511 92	2, 771 92
Extract of indigo	4, 903 64	3, 572 4	3, 156 76	7, 115 64	18, 538 68
Flax warps, &c			292 68		292 68
Flocks	655 79			224 89	880 68
Fustians			4, 070 50	5, 702 31	9, 772 81
Flyers, for flax machinery		484 88			484 88
Gray and white cattle-hair		2, 308 90	4, 361 46		6, 669 36
Grinding-machine, grindstones, and steel rods	537 18				537 18
Gutta-percha	1, 383 25				1, 383 25

Statement showing the value of declared exports, &amp;c.—Continued.

Articles.	Quarter-ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Gypsum.....		\$25 60			\$25 60
Haircloth.....			\$1,080 54	\$646 00	1,726 54
Hatters' fur.....			325 82		325 82
Imperial linen drilling.....		1,379 78			1,379 78
Iron.....	\$303 54				303 54
Leather.....	5,118 16	10,192 83	5,488 76	8,756 06	29,555 81
Linen.....	14,140 47	10,119 53	3,344 16	5,398 32	33,002 47
Linen and cotton.....	8,943 16	2,432 47	287 87		11,663 50
Machinery.....	31,219 78	13,680 97	9,289 00	27,191 22	71,380 97
Mohair and cotton.....		212 00	3,204 45	10,955 98	14,372 43
Needles.....			140 00		140 00
New woolen rugs.....		2,775 76			2,775 76
Olive oil.....	2,312 66		1,117 14		3,429 80
Orchard liquor.....			262 26	1,344 56	1,606 82
Paper.....			259 85	541 60	801 45
Paper hangings.....		557 90			557 90
Patent dabbers.....	423 00				423 00
Plants.....			37 40		37 40
Port wine.....			26 56		26 56
Potts' patent traps.....	55 96				55 96
Raising gigs.....	567 88				567 88
Roans.....		264 27			264 27
Rollers, &c., for machinery.....	977 24			181 32	1,158 56
Seeds and plants.....	173 34			300 60	473 94
Shawls.....		696 93		1,263 75	1,960 68
Shirtings.....	905 58				905 58
Silks.....	243 75		745 20	3,664 85	4,653 80
Steel.....	113 70				113 70
Stuffs.....		1,719 25		927 70	2,646 95
Sundries.....	3,213 92			326 65	3,540 57
Threads.....	17,128 06	29,938 16	37,270 66	38,311 40	122,648 28
Trees.....		71 50			71 50
Twines.....	762 30	423 62	1,107 00	685 69	2,978 61
Union cloths.....	1,816 14	485 24	1,080 24	2,823 12	6,204 74
Unions (linen and cotton).....	1,099 24				1,099 24
Varnish.....			146 18		146 18
Water-proof tissue.....			982 75		982 75
Wire plates.....			965 25		965 25
Woolens.....	69,960 01	300,080 71	50,415 51	345,495 18	765,951 36
Woolens and cotton.....	3,069 10	664 04		14,008 29	17,741 43
Woolens and silk.....	346 87	180 56		180 25	707 68
Woolens and worsteds.....	4,274 10	10,952 63		3,191 91	18,418 63
Woolens, worsteds, and silk.....		216 39			216 39
Worsteds.....	21,896 08	38,854 67	11,019 22	76,552 54	148,324 51
Worsteds and cotton.....			1,148 45		1,148 45
Worsteds and silk.....		2,172 27			2,172 27
Worsteds and woolen.....			24,123 25		24,123 25
Worsteds and woolen cloths.....	441 96				441 96
Woolens and worsteds, China.....				7,361 30	7,361 30
Wine.....				99 83	99 83
White cattle hair.....				1,830 90	1,830 90
Wooden rollers.....				266 52	266 52
Total in United States gold.....	257,000 26	471,996 49	208,031 25	619,937 96	1,556,965 96
Total for preceding year.....	267,411 19	507,527 98	198,094 94	438,386 48	1,411,370 59
Increase.....			9,936 31	181,601 48	145,595 37
Decrease.....	10,410 83	35,531 49			

UNITED STATES CONSULATE,  
Leeds, October 15, 1879.

A. V. DOCKERY.

## LIVERPOOL.

*Report, by Consul Packard, on the trade and commerce of Liverpool for the year 1878.*

I have the honor, pursuant to the Consular Regulations, to make the following commercial report for the year 1878, accompanied by tables of statistics.

Generally British trade with the United States shows an important increase in some respects and revival in others.

Imports from the United States during the year were \$433,250,386 in value, being \$55,016,168 more than for the previous year.

Of the above stated total value of imports from the United States into Great Britain, there was entered at the port of Liverpool during the year ending December 31, 1878, \$261,327,021. Table No. 14 shows the value of the leading articles of United States produce entered at this port for the calendar year.

*Provisions.*—The most noticeable feature of these imports is a very large increase in that of provisions. In 1877 Great Britain paid \$56,224,013 for bacon and hams, beef, butter, and cheese, but in 1878 the sum of \$66,251,355, being an increase of \$10,027,342. It seems particularly worthy of notice that in the year 1874 the value of such provisions imported was \$37,264,259 as against \$66,251,355 in 1878, there being a difference of \$28,987,096 in favor of the latter year.

*Breadstuffs.*—The amount of breadstuffs imported during the year was \$147,693,062, being \$31,825,408 over that of the previous year, and a comparison of the value of breadstuffs imported in 1874 shows the very large increase over that year of \$84,776,707 in 1878.

*Horned cattle.*—The importation of cattle is yet in its infancy, having commenced in 1875, in which year they numbered 299, valued at \$43,764. During 1878 the number was 68,903, valued at \$8,118,679. Sheep and lambs, first imported in 1877, numbered 13,120, valued at \$146,393, and in 1878, 45,567, valued at \$539,057. There is a small, but increasing number of horses and swine imported.

*Tobacco, unmanufactured.*—The importation of this article is fluctuating, but shows an increase of 17,866,691 pounds over 1877.

*Cotton, raw,* has increased from 8,145,041 cwt. in 1877 to 9,162,419 cwt. in 1878.

*Hides, dressed,* show a large increase. In 1877 the quantity was 19,633,318 pounds, and in 1878, 23,226,155 pounds, being 3,592,837 pounds more.

*Wool* shows a large increase. In 1877 the quantity was 418,509 pounds, and in 1878, 938,239 pounds, being 519,730 pounds more.

*Beef, fresh.*—The importation of this article is still steadily increasing. In 1874 it was but 1,095 cwt., whilst in 1878 it was 483,012 cwt., that being an increase of 39,970 cwt. over 1877.

*Pease.*—This article is very fluctuating, there being only 470,900 cwt. imported in 1878; there is a decrease of 118,471 cwt. as compared with 1877.

*Naphtha.*—This article is very fluctuating, there being but 1,727,242 gallons imported in 1878; there is a marked decrease of 974,291 gallons, as compared with 1877.

*Wood and timber.*—The imports of all kinds have sensibly decreased.

*Exports from the United Kingdom to the United States.*—A great decrease, as compared with 1877, occurred in 1878, as will be seen on reference to the tables herewith. Since 1874 there has been a gradual decrease from \$137,255,192 to \$70,723,089 in 1878.

The most noticeable items of decrease are cottons from 61,174,762 yards, value \$6,410,087, in 1877, to 48,891,400 yards, value \$5,536,182, in 1878; linens by the yard, from 80,857,290 yards, value \$10,734,288, in 1877, to 69,080,900 yards, value \$9,281,215, in 1878; wool from 3,663,174 pounds, value \$1,149,813, in 1877, to 339,600 pounds, value \$118,341, in 1878; wo l ens by the yard, from 34,792,397 yards, value \$8,046,187, in 1877, to 30,693,400 yards, value \$6,836,166, in 1878.

#### NAVIGATION.

During 1878, 4,844 vessels, tonnage 4,403,299, arrived at Liverpool, and 4,714 vessels, tonnage 4,387,894, cleared to foreign countries and British possessions. There arrived from the United States 1,563 vessels, tonnage 2,170,178, and 1,247, tonnage 1,840,668, cleared. Of the vessels which arrived, 3,525, tonnage 3,552,297, were British, and only 238 vessels, tonnage 320,748, were American; 1,363 vessels, tonnage 6,390, entered with cargoes, and 1,853 vessels, tonnage 303,323, entered in ballast, and 12,078 vessels, tonnage 5,667,699, cleared with cargoes, and 2,953 vessels, tonnage 998,133, cleared with ballast.

#### SHIP-BUILDING.

There were 38 sailing and 26 steam vessels, tonnage 29,040, built at Liverpool in 1878.

#### CUSTOMS REVENUE.

The customs revenue receipts were \$14,705,232 in 1877, and \$15,047,813 in 1878, an increase of \$342,581.

#### LIVERPOOL DOCKS.

The receipts from all sources during 1878 were \$5,787,380, and the expenditure \$5,059,916. The amount of dock-dues received, inclusive of duties on tonnage, duties on goods, and harbor rates, was \$3,285,261 in 1877, and \$3,225,665 in 1878, a decrease of \$59,596.

During 1878, 18,841 vessels, tonnage 7,029,082, paid \$4,900,498, a decrease of \$155,024, compared with 1877.

There are ten warehouses owned by the Docks and Harbor Board. The surplus receipts, after payment of all expenses, amounted to \$285,476 in 1878.

*Foreign animals' wharves and slaughter-houses.*—There are in Liverpool five wharves, provided in accordance with the requirements of the contagious diseases (animals) act, 1878, for the landing and slaughtering of foreign animals—two on the Lancashire side and three on the Cheshire side of the river Mersey. The first was occupied by cattle on the 7th of March, 1879. Between that time and the 30th of August the number of American cattle landed was 21,684 oxen, 2,243 pigs, and 6,419 sheep. Of these, 20,806 oxen, 2,124 pigs, and 2,158 sheep were immediately slaughtered. The wharves and slaughter-houses have been provided by the Mersey Docks and Harbor Board, and are under the supervision of their own servants; but the cost of landing, keeping, slaughtering, and removing of the cattle is directly borne by the importers.

The charge for landing and remaining the first twenty-four hours after inspection is, for oxen, per head, 1s.; calves, 6d.; pigs, 5d.; and sheep, 2d. Afterwards, for each portion of twenty-four hours, it is, oxen, 6d.;



calves, 3d.; pigs, 2½d.; and sheep, 1d. For slaughtering, the charge per head is, for oxen, 1s.; calves, 9d.; pigs, 6d.; and sheep, 3d.

S. B. PACKARD.

UNITED STATES CONSULATE,  
Liverpool, October 1, 1879.

*Statement showing the number and tonnage of British and foreign vessels, including their repeated voyages, that entered and cleared with cargoes and in ballast from and to foreign countries and British possessions at the port of Liverpool during the year 1878.*

From and to—	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
Russia.....	78	36,676	121	45,333
Sweden.....	32	15,610	41	20,284
Norway.....	111	41,493	82	32,586
Denmark.....	36	3,257	90	17,215
Danish West India Islands.....	6	6,134	32	22,505
Germany.....	125	68,000	135	72,244
Holland.....	106	63,767	107	60,512
Dutch possessions in Java.....	8	5,435	7	5,270
Dutch possessions in West India Islands.....	3	3,748	5	4,030
Dutch Guiana.....	5	1,130	4	1,896
Belgium.....	84	58,716	80	47,595
France.....	330	140,223	251	102,502
Algeria.....	14	9,084	8	1,555
Possessions in Senegambia.....	1	263	12	3,082
West India Islands.....	179	76,591	112	40,698
Portugal.....	179	76,591	112	40,698
Azores.....	1	136	10	1,548
Madeira.....	1	136	1	136
Possessions in Western Africa.....	1	136	3	769
Spain.....	279	131,983	133	59,318
Spain, Canary Islands.....	1	229	1	229
Possessions in India, Philippine, and Ladrone Islands.....	40	38,366	6	6,424
West India Islands.....	40	14,938	150	106,400
Italy.....	113	110,905	136	123,100
Austrian territories.....	6	4,551	3	1,160
Greece.....	30	27,437	16	14,962
Turkey, European.....	44	51,602	79	80,811
Wallachia and Moldavia.....	7	4,726	11	7,170
Asia.....	13	8,743	1	181
Egypt.....	82	94,555	72	86,394
Morocco.....	21	2,966	13	1,466
Tripoli and Tunis.....	14	15,169	1	876
Africa, western coast not particularly designated.....	78	66,451	144	83,024
Eastern coast, native states.....	1	876	1	876
China (exclusive of Hong-Kong and Macao).....	3	2,066	4	2,816
Japan.....	4	2,854	2	768
Islands of the Pacific (exclusive of Fiji).....	1,472	2,050,010	1,219	1,805,055
United States of America on the Atlantic.....	91	120,168	28	35,613
United States of America on the Pacific.....	12	3,215	16	16,595
Hayti and the Dominican Republic.....	64	40,379	20	11,291
Mexico.....	3	1,459	1	281
Central America.....	16	17,186	3	1,131
United States of Colombia (New Granada).....	8	1,396	1	30,231
Venezuela.....	122	115,209	51	30,231
Ecuador.....	16	11,643	83	102,447
Peru.....	28	23,397	245	138,038
Bolivia.....	199	91,211	49	62,812
Chili.....	13	6,044	37	21,256
Brazil.....	61	60,265	3,623	3,279,627
Uruguay.....	852	753,649	1,091	1,106,267
States of Argentine Confederation.....	4,844	4,403,299	4,714	4,387,894
Total foreign countries.....	4,220	3,650,799	3,723	3,155,236
Total British possessions.....	1,033	902,626	1,326	1,332,546
Grand total.....	5,253	4,553,425	5,049	4,487,782
Increase, 1878.....	409	150,126	835	99,888
Decrease, 1878.....				

*Statement showing the number and tonnage of sailing and steam vessels of each nation, including their repeated voyages, that entered and cleared with cargoes and in ballast from and to foreign countries and British Possessions at the port of Liverpool during the year 1878.*

Flag.	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
British .....	3,525	3,552,297	3,342	3,528,067
Russian .....	28	15,766	87	21,049
Swedish .....	79	40,308	89	43,548
Norwegian .....	335	153,847	345	161,877
Danish .....	71	10,430	84	11,206
German .....	168	70,720	185	78,197
Dutch .....	21	5,360	26	5,677
Belgian .....	13	14,215	2	1,204
French .....	67	27,583	68	28,711
Spanish .....	201	184,374	206	140,728
Portuguese .....	3	1,307	4	1,430
Italian .....	60	34,589	58	31,682
Austrian .....	22	12,924	17	9,826
Greek .....	5	2,468	4	1,662
United States of America .....	238	320,748	240	322,492
All other countries .....	8	4,363	5	2,586

*Statement showing the number and tonnage of sailing and steam vessels, including their repeated voyages, that entered and cleared to and from British Possessions, foreign countries, and coastwise, with cargoes and in ballast at the port of Liverpool during the year 1878.*

Entered.	Sailing.		Steam.		Total.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Entered with cargoes .....	6,156	1,767,595	7,474	4,622,638	13,630	6,390,233
Entered in ballast .....	1,246	163,906	607	139,417	1,853	303,323
Total with cargoes and in ballast.	7,402	1,931,501	8,081	4,762,055	15,483	6,693,556

Cleared.	Sailing.		Steam.		Total.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Cleared with cargoes .....	4,996	1,469,929	7,082	4,197,770	12,078	5,667,699
Cleared in ballast .....	2,274	671,765	679	426,368	2,953	998,133
Total with cargoes and in ballast.	7,270	2,041,694	7,761	4,624,138	15,031	6,665,832

*Statement showing the number and tonnage of all vessels, including their repeated voyages, that entered and cleared with cargoes and in ballast from and to foreign countries and British Possessions at the port of Liverpool during the years 1874, 1875, 1876, 1877, and 1878.*

Year.	Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.
1874 .....	5,442	4,352,816	5,174	4,215,025
1875 .....	5,481	4,402,116	5,184	4,378,203
1876 .....	5,381	4,494,356	5,219	4,457,047
1877 .....	5,258	4,563,425	5,049	4,487,783
1878 .....	4,844	4,403,299	4,714	4,387,894

*Statement showing the number and tonnage of British and foreign vessels, including their repeated voyages, that entered and cleared with cargoes and in ballast coastwise at the port of Liverpool during the years 1874, 1875, 1876, 1877, and 1878.*

[It should be understood that this table includes the vessels that entered and cleared in ballast which have not been included in previous tables.]

Year.	Entered.		Cleared.	
	Number.	Tons.	Number.	Tons.
1874.....	8,574	1,905,508	8,455	1,595,064
1875.....	8,119	2,027,752	8,917	2,016,504
1876.....	8,999	2,050,966	8,727	1,981,755
1877.....	9,632	2,070,845	9,216	2,115,868
1878.....	10,639	2,290,257	10,317	2,277,938

*Statement showing the number and tonnage of sailing and steam vessels built at Liverpool (exclusive of vessels built for foreigners) during the years 1874, 1875, 1876, 1877, and 1878.*

Year.	Sailing.		Steam.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
1874.....	12	11,183	25	12,525	37	23,707
1875.....	15	15,950	11	5,307	26	21,257
1876.....	34	21,167	12	4,826	46	25,993
1877.....	19	20,564	15	11,783	34	32,347
1878.....	38	15,267	26	13,783	64	29,040

Comparative statement showing the quantities and values of the produce of the United Kingdom exported from the port of Liverpool during the years 1877 and 1878.

Principal articles.	Quantities, 1877.	Values, 1877.	Quantities, 1878.	Values, 1878.	Increase in quantities.	Decrease in quantities.	Increase in values.	Decrease in values.
Alkali.....	2,535,228	\$5,987,787	2,621,169	\$5,584,704	85,941			\$403,083
Apparel.....		1,746,728		1,531,653				215,075
Arms and ammunition:								
Firearms (small).....	136,241	426,548	173,996	628,622	37,755	731,146	\$202,074	64,307
Gunpowder.....	5,992,946	527,572	5,261,700	463,265				326,563
Of all other sorts.....	1,152,491	842,194	1,241,608	515,631				183,023
Bags and sacks for packing merchandise.....	102,615	2,718,135	98,704	1,980,499	89,115	5,861	14,420	
Beer and ale.....	22,620	1,083,033	24,188	2,535,112	1,568		38,312	
Books, printed.....	27,289	1,923,628	27,967	1,311,245	678		7,096	
Butter.....	571,914	94,576	531,000	930,724		40,914		
Candles (of all sorts).....		1,113,368		85,920				8,656
Ceramic manufactures of.....		2,087,156		742,209				371,159
Chemicals, products or preparations.....	716,156	1,996,294	614,741	1,744,973				342,183
Coals, cluders and patent fuel.....	69,175,000	16,675,010	82,081,100	19,680,816	12,906,100	101,415	2,487,907	315,478
Cotton yarn.....				19,162,917				
Cotton manufactures:								
Piece-goods.....	2,388,350,300	155,196,480	2,382,498,200	148,762,121		5,852,100		6,434,359
Hosiery and small wares.....		8,291,797		8,515,572			224,075	
Earthen and china ware of all sorts.....		5,426,447		5,158,085				268,364
Fish, herrings.....	32,649	1,733,687	21,007	1,133,962		11,642		59,725
Glass all kinds.....		1,433,063		1,205,696				227,366
Haberdashery and millinery.....		6,806,490		6,700,555			94,065	
Hardware and cutlery, unenumerated.....		7,869,502		7,619,571				249,931
Hats of all sorts.....	168,741	1,016,955	181,964	882,381	13,223			84,574
Leather:								
Unwrought.....	17,883	631,805	20,946	589,105				42,700
Wrought.....		1,062,871		997,180				5,691
Saddlery and harness.....		311,820		281,768				30,152
Linen and jute yarn:								
Linen yarn.....	7,597,200	2,298,948	6,768,500	1,798,950		830,700		488,998
Jute yarn.....	4,978,600	376,781	4,415,100	378,653		563,500	2,172	
Linen and jute manufactures:								
Linen and piece goods.....	92,629,900	13,639,585	79,777,900	12,297,064		13,182,000		1,342,521
Linen thread and unenumerated.....		1,774,728		1,304,165			29,437	
Jute manufactures.....	24,252,100	1,561,558	17,983,600	1,255,070		6,296,500		336,458
Machinery and millwork.....		10,820,664		8,780,418				2,036,246
Metals:								
Iron, pig, bar, bolt, and wire.....	182,848	6,769,399	137,576	4,841,668		45,272		1,917,601
Iron, railroad.....	65,777	2,781,086	85,470	1,303,504		30,807		1,277,582
Iron of all other sorts, including tin plates.....	264,853	21,848,988	261,818	19,664,624		3,015		1,694,369
Steel, unwrought.....	10,167	1,643,725	10,165	1,458,862				187,868
Copper, unwrought.....	64,760	1,578,110	82,440	1,458,868		2,820		134,212
Copper, part-wrought and wrought.....	201,940	5,846,948	171,250	2,941,714		30,730		905,229

Comparative statement showing the quantities and values of the produce of the United Kingdom from Liverpool, &amp;c.—Continued.

Principal articles.	Quantities, 1877.	Values, 1877.	Quantities, 1878.	Values, 1878.	Increase in quantities.	Decrease in quantities.	Increase in values.	Decrease in values.
<b>Metals—Continued.</b>								
Lead and lead ore.....	3, 804	\$359, 241	3, 141	\$306, 180		163		\$53, 061
Tin, unwrought.....	40, 060	736, 353	31, 013	508, 053		9, 077		228, 298
Oil, seed.....	3, 178, 850	1, 922, 850	2, 798, 600	1, 641, 057		380, 250		282, 793
Painters' colors.....		1, 046, 941		948, 609				98, 332
Paper (except hangings).....	82, 465	368, 861	33, 288	371, 600		823	\$2, 619	
Salt.....	714, 349	1, 792, 285	687, 113	1, 949, 851		27, 286	157, 566	
<b>Silk.....</b>								
Thrown, twist and yarn.....		130, 992		78, 358				52, 634
Manufactures.....		1, 629, 738		1, 452, 368				197, 370
Spirits, British and Irish.....		219, 087		184, 508				50, 549
Sugar, refined.....	596, 820	3, 370, 027	532, 101	2, 972, 930		95, 912		997, 097
Telegraph wires and apparatus.....		237, 946		197, 855		66, 719		40, 091
Wool, sheep and lambs'.....	3, 679, 660	1, 173, 884	462, 200	189, 453		3, 217, 460		984, 431
Woolen and worsted yarn.....	121, 000	84, 379	131, 800	106, 483		13, 800	22, 104	
Woolen manufactures.....								
Cloths of all kinds.....	13, 027, 800	9, 879, 602	12, 738, 300	8, 969, 495		889, 500		910, 107
Worsted and mixed stuffs.....	77, 944, 100	14, 190, 617	78, 848, 700	14, 457, 528		904, 800	266, 911	
Flannels, carpets, &c.....	7, 254, 300	3, 451, 232	6, 231, 900	2, 947, 833		1, 022, 400		503, 399
Hosiery and other goods.....		992, 208		1, 129, 707			137, 499	
All other articles.....		18, 379, 320		17, 658, 780				720, 540
<b>Total value.....</b>		354, 122, 166		352, 762, 724			3, 686, 257	25, 045, 089
<b>Net decrease.....</b>								21, 359, 442

Value of total exports of the United Kingdom from the port of Liverpool during the years 1874, 1875, 1876, 1877, and 1878: 1874, \$409,979,818; 1875, \$386,179,347; 1876, \$340,767,240; 1877, \$354,122,165; 1878, \$352,762,727.

*Comparative statement showing the quantities of foreign and colonial produce exported from the port of Liverpool during the years 1877 and 1878.*

Principal articles.	Quantities, 1877.	Quantities, 1878.	Increase.	Decrease.
Bacon and hams.....cwt.	241,512	288,493	46,981	
Bark, Peruvian.....do.	1,162	3,583	2,421	
Caoutchouc.....do.	35,930	39,412	3,482	
Cocoa.....pounds.	1,572,949	2,625,078	1,052,129	
Coffee.....cwt.	117,782	103,485		14,297
Corn:				
Wheat.....cwt.	19,808	44,456	24,648	
Wheatmeal and flour.....do.	3,796	11,121	7,325	
Cotton:				
Raw.....cwt.	524,751	583,868	59,117	
Manufactures.....value.	\$388,042	\$307,959		\$80,083
Dyes and dyeing stuffs:				
Cochineal.....cwt.	2,420	1,654		766
Indigo.....do.	2,243	2,024		219
Flax, dressed and undressed.....do.	3,485	1,200		2,225
Fruits:				
Currants.....cwt.	29,707	56,273	26,566	
Raisins.....do.	20,331	22,825	2,494	
Guano.....tons.	631	91		540
Hemp, dressed and undressed.....cwt.	52,839	55,468	2,629	
Hides, untanned.....do.	83,635	62,876		20,759
Jute.....do.	13,335	13,217		118
Metals:				
Copper, unwrought and part wrought, tons	5,616	5,144		472
Iron bars.....tons	567	814	247	
Tin, in blocks, ingots, slabs, and regulus.....cwt.	2,058	3,345	1,287	
Oil:				
Cocoanut.....cwt.	2,239	3,466	1,227	
Palm.....do.	308,893	150,684		158,209
Quicksilver.....pounds.	727,675	768,318	40,643	
Rice, not in the husk.....cwt.	1,809,487	2,288,327	478,840	
Saltpeter.....do.	2,666	1,831		835
Seeds:				
Flax or linseed.....quarters.	94	205	111	
Rape.....do.	24	701	677	
Silk:				
Raw.....pounds.	96,620	112,970	16,350	
Thrown.....do.		60	60	
Manufactures.....value.	\$139,987	\$156,142	\$16,155	
Spices:				
Cinnamon.....pounds.	225,763	118,264		107,499
Pepper.....do.	1,465,400	1,096,093		369,307
Spirits:				
Brandy.....proof gallons.	44,994	25,366		19,628
Geneva.....do.	6,097	4,905		1,132
Rum.....do.	235,573	283,335		2,238
Other unsweetened spirits.....do.	2,454	60,092	57,638	
Mixed in bond.....do.	599,401	364,158		235,213
Sugar:				
Unrefined.....cwt.	78,849	54,903		23,946
Foreign, refined and candy.....do.	4,957	2,632		2,325
Molasses.....do.	2,730	6,375	3,645	
Tallow and stearine.....do.	22,027	7,414		14,613
Tea.....pounds.	145,850	133,850		12,000
Tobacco:				
Unmanufactured.....pounds.	7,656,660	7,487,534		169,126
Foreign, manufactured and snuff.....do.	290,528	375,357	84,829	
Wine.....gallons.	83,185	93,046	9,861	
Wool, sheep and lambs'.....pounds.	5,714,300	2,476,000		3,238,300

*Comparative statement showing the quantities of foreign and colonial produce imported into the port of Liverpool during the years 1877 and 1878.*

Principal articles.	Quantities, 1877.	Quantities, 1878.	Increase.	Decrease.
Animals living:				
Oxen, bulls, and cows.....number.	17,179	56,513	39,334	
Sheep and lambs.....do.	8,151	55,558	47,407	
Bones (except whale fins).....tons.	13,814	9,981		3,833
Caoutchouc.....cwt.	114,931	104,009		10,022
Chemical manufactures and products.....value.	\$1,100,921	\$804,670		\$196,251
Cocoa.....pounds.	3,484,750	3,912,460	427,710	
Coffee.....cwt.	138,663	110,716		27,947

Comparative statement showing the quantities of foreign and colonial produce, &c.—Continued.

Principal articles.	Quantities, 1877.	Quantities, 1878.	Increase.	Decrease.
<b>Corn:</b>				
Wheat.....cwt.	14,846,701	12,911,207		1,935,494
Barley.....do.	391,335	186,567		204,768
Oats.....do.	137,751	195,432	57,681	
Pease.....do.	462,282	656,242	193,960	
Beans.....do.	1,254,278	631,503		622,775
Indian corn or maize.....do.	7,399,090	9,544,494	2,145,404	
Wheat-meal and flour.....do.	1,918,310	2,177,179	258,869	
<b>Cotton:</b>				
Raw.....cwt.	11,621,293	11,537,134		84,159
Manufactures.....value.	\$615,869	\$814,274	\$198,405	
<b>Dyes and dyeing stuffs:</b>				
Cochineal.....cwt.	20,210			20,210
Indigo.....do.	958	757		201
<b>Flax.....do.</b>	8,440	12,257	3,817	
<b>Fruit:</b>				
Currants.....cwt.	422,753	378,532		44,221
Oranges and lemons.....bushels.	1,235,465	1,298,440	62,975	
Raisins.....cwt.	132,760	113,671		19,089
Glass, of all kinds.....do.	45,093	64,539	19,446	
Guano.....tons.	15,395	21,808	6,413	
Hemp.....cwt.	434,147	445,655	11,508	
<b>Hides:</b>				
Raw.....cwt.	308,121	239,246		68,875
Tanned, tawed, curried, or dressed.....tons.	18,668,092	21,228,599	2,560,507	
Hops.....cwt.	67,748	59,955		7,793
Horses.....number.	1,237	2,225	988	
Jute.....cwt.	278,819	257,061		21,758
Leather gloves.....dozen pairs.	2,011	2,048	37	
<b>Metals:</b>				
Copper ore and regulus.....tons.	46,390	48,366	1,976	
Unwrought and part wrought.....do.	25,178	28,275	3,097	
Iron, pig.....do.	2,646	490		2,156
Iron, bar.....do.	1,828	1,437		391
Iron, cast and wrought of all sorts.....do.	8,315	9,550	1,235	
Lead, pig and sheet.....do.	6,966	7,472	506	
Zinc in ingots, slabs, and regulus.....cwt.	2,523	2,519		9
Zinc, crude and manufactured.....do.	52,840	53,200	360	
<b>Oil:</b>				
Train, blubber and spermaceti.....tuns.	3,644	3,918	274	
Olive.....do.	10,771	7,599		3,172
Palm.....cwt.	750,945	548,357		202,588
Seed of all kinds.....tons.	1,243	1,401	158	
Oil-seed cake.....do.	41,655	54,070	12,415	
Paper (except hangings) of all kinds.....cwt.	13,481	14,646	1,165	
Petroleum.....gallons.	5,938,147	5,950,251	12,104	
<b>Provisions:</b>				
Bacon and hams.....cwt.	2,030,741	3,077,120	1,046,379	
Beef, salted and fresh.....do.	418,835	544,269	125,434	
Pork, salted and fresh.....do.	151,032	203,306	52,274	
Meat, not otherwise described.....do.	148,233	151,721	3,488	
Butter.....do.	123,612	153,724	30,112	
Cheese.....do.	779,509	1,099,827	230,318	
Eggs.....great hundred.	42,869	52,188	9,319	
Fish.....cwt.	240,985	276,997	36,012	
Lard.....do.	434,472	608,960	174,488	
Potatoes.....do.	144,895	190,033	45,138	
Pyrites of iron or copper.....tons.	235,397	210,620		24,777
Rags and other material for making paper, tons.	48,087	32,274		15,813
Rice, not in the husk.....cwt.	3,910,805	3,434,988		475,817
Saltpeter and cubic nitre.....do.	383,314	653,060	269,746	
<b>Seeds:</b>				
Clover and grass.....cwt.	34,330	42,519	8,189	
Cotton.....tons.	12,025	8,809		3,216
Flax and linseed.....quarters.	183,455	228,070	44,615	
Rape.....do.	6,958	9,223	2,265	
<b>Silk:</b>				
Raw.....pounds.	5,188	3,651		1,537
Manufactures.....value.	\$36,766	\$14,697		\$22,069
Skins, sheep and lambs.....number.	2,093,960	2,343,550		650,419
<b>Spirits:</b>				
Rum.....proof gallons.	1,848,516	1,810,816		37,700
Brandy.....do.	441,371	556,940	115,569	
Geneva.....do.	54,744	55,472	728	
Other unswweetened spirits.....do.	194,394	115,626		78,768
<b>Sugar:</b>				
Unrefined.....cwt.	4,222,030	4,054,407		167,623
Refined.....do.	171,155	190,599	19,444	
Tallow and stearine.....do.	473,54	368,988		104,554
<b>Tea.....pounds</b>	16,478	21,297	4,819	

*Comparative statement showing the quantities of foreign and colonial produce, &c.—Continued.*

Principal articles.	Quantities, 1877.	Quantities, 1878.	Increase.	Decrease.
<b>Tobacco:</b>				
Unmanufactured .....	pounds.. 30,941,891	44,110,376	13,168,485	.....
Manufactured, cigars and snuff... do...	982,142	1,062,374	80,232	.....
Wine .....	gallons.. 2,312,822	1,839,741	.....	473,081
<b>Wood and timber:</b>				
Hewn .....	loads.. 232,527	108,000	.....	124,527
Sawn or split .....	do... 558,579	441,643	.....	116,936
Staves .....	do... 11,205	7,118	.....	4,087
Mahogany .....	tons.. 14,418	12,390	.....	2,028
<b>Wool:</b>				
Sheep and lambs' .....	pounds.. 42,710,596	42,874,234	163,638	.....
Alpaca, vicuña, and llama .....	do... 3,579,245	3,974,378	395,133	.....
<b>Woolen:</b>				
Yarn .....	pounds.. 7,757	4,245	.....	3,512
Manufactures .....	value.. \$375,197	\$385,563	\$10,366	.....

Value of total imports of foreign and colonial produce at the port of Liverpool during the years 1874, 1875, 1876, 1877, and 1878: 1874, \$520,237,493; 1875, \$510,762,614; 1876, \$484,154,799; 1877, \$481,848,675; 1878, \$456,355,891.

*Statement showing the total value of imports from the United States entered at the port of Liverpool during the year 1878.*

Articles.	Quantities.	Declared value.
<b>Bacon</b> .....	cwt.. 2,408,482	\$20,820,303
<b>Beef:</b>		
Salted .....	cwt.. 85,268	728,358
Fresh .....	do... 338,106	4,277,918
<b>Butter</b> .....	do... 106,089	2,167,171
<b>Cheese</b> .....	do... 797,209	9,127,537
<b>Corn:</b>		
Wheat .....	cwt.. 10,384,298	29,193,544
Maize or Indian corn .....	do... 7,400,636	10,774,751
Oatmeal .....	do... 287,903	874,717
Wheat meal or flour .....	do... 1,194,319	4,849,692
<b>Cotton, raw</b> .....	do... 9,112,635	122,569,695
<b>Fish, cured or salted</b> .....	do... 117,727	1,485,566
<b>Hides, tawed, not otherwise dressed</b> .....	pounds.. 18,324,417	4,188,586
<b>Hams</b> .....	cwt.. 647,781	7,396,526
<b>Lard</b> .....	do... 607,559	5,627,554
<b>Meat, preserved, otherwise than salting</b> .....	do... 116,771	1,590,805
<b>Oil-seed cake</b> .....	tons.. 51,356	1,944,000
<b>Petroleum, refined</b> .....	gallons.. 5,939,125	1,287,365
<b>Pork, salted</b> .....	cwt.. 195,577	1,357,500
<b>Tallow and stearine</b> .....	do... 270,563	2,548,851
<b>Tobacco, unmanufactured</b> .....	pounds.. 41,543,935	4,977,277
<b>All other articles</b> .....		23,530,305
<b>Total</b> .....		261,327,021

*Statement showing the quantities of merchandise imported into the port of Liverpool for transhipment during the year 1878.*

<b>Spirits: Rum</b> .....	gallons.. 260,682
Brandy .....	do... 253,685
Geneva .....	do... 495,931
Of all other sorts. ....	do... 90,746
<b>Tea</b> .....	pounds.. 160,950
<b>Tobacco: Unmanufactured</b> .....	do... 2,884,790
Manufactured and cigars .....	do... 613,643
<b>Other articles not separately enumerated</b> .....	value.. \$22,999,041

*Statement showing the gross amount of customs revenue received at the port of Liverpool during the years 1874, 1875, 1876, 1877, and 1878.*

1874 .....	\$14,415,931
1875 .....	14,188,376
1876 .....	14,479,111
1877 .....	14,705,232
1878 .....	15,047,813



Statement showing the value of declared exports from the consular district of Liverpool to the United States during the four quarters of the year ending September 30, 1879; also a comparative statement of the total exports for the years ending September 30, 1878 and 1879.

Articles.	Quarter ending—				Total for the year 1879.	Total for the previous year.	Increase.	Decrease.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.				
Beer .....	\$52,785 62	\$17,791 93	\$11,660 13	\$11,456 64	\$73,694 32	\$81,908 91	\$725,291 34	\$8,214 59
Chemicals .....	1,081,438 49	1,050,643 28	1,105,420 61	1,432,454 27	4,069,956 65	3,944,065 31	29,518 01	
Coal .....	33,129 29	33,671 31	92,015 78	66,753 79	234,570 17	205,052 16		101,729 96
Dry goods .....	24,040 51	125,268 57	13,631 07	7,902 90	170,843 05	272,573 01		
Earthenware and glass .....	40,481 52	40,416 28	91,553 99	129,843 10	332,374 89	185,248 19	147,026 70	
Fruit and vegetables .....	373,557 41	120,893 60	37,841 90	113,506 25	645,799 16	953,650 08		307,859 92
Machinery .....	6,530 84	3,768 67	7,144 03	2,568 98	20,030 52	34,539 17		14,428 65
Hemp and flax .....	6,437 96	5,927 40	8,866 77	6,496 77	27,728 90	12,157 05	15,571 85	
India rubber .....	324,045 14	80,467 58	309,971 73	295,725 50	980,210 45	478,009 07	502,201 38	
Iron .....	75,781 14	60,973 38	68,184 52	243,655 92	448,209 50	141,522 37	304,687 13	
Leather and canvas .....	56,398 13	40,973 38	40,503 88	53,341 70	211,296 09	294,131 58	104,768 09	
Leather and skins .....	370,394 44	206,480 73	266,387 88	473,962 38	1,317,195 43	404,890 15	32,653 27	
Rags and waste paper .....	161,791 67	73,513 35	85,922 83	115,815 47	437,043 42	1,167,655 89	104,563 75	
Salts .....	335,511 12	328,941 33	254,011 57	353,755 62	1,272,219 64	1,167,655 89	3,549 05	
Slates, tiles, and bricks .....	8,293 31	9,173 35	10,871 76	7,698 35	35,914 77	28,968 27	4,946 50	
Steel and steel wire .....	7,796 13	9,394 74	25,293 60	33,865 98	76,170 45	28,968 27	4,946 50	
Tin plates .....	1,877,696 03	2,140,276 97	2,426,276 31	2,364,009 43	8,308,678 68	7,680,902 30	1,118,236 77	
Tin .....	8,779 17	101,889 91	50,139 58	59,870 04	330,678 68	180,690 91	141,168 77	
Wire rope .....	11,543 34	10,662 50	14,647 60	19,689 86	58,743 39	48,749 58	7,893 83	
Wood .....	29,938 71	97,889 65	466,118 24	473,997 10	1,667,943 70	234,385 27	833,558 43	
Wool .....	13,481 76	52,889 13	27,004 88	103,748 92	186,304 23	116,433 98	69,872 25	
Pig iron .....	44,258 84	20,522 57	25,004 88	103,748 92	167,535 21	88,587 28	78,947 93	
Coke .....	4,944 36	3,997 80	2,798 50	7,659 96	19,290 52	19,707 95		407 43
Yellow metal .....	19,315 14	3,698 08	28,419 41	6,671 97	58,412 60	92,321 71		33,909 11
Grains and oil .....	20,857 81	13,594 54	12,293 65	19,538 34	49,287 91	107,785 67		58,497 76
Paints and colors .....	7,231 61	3,973 13	7,346 42	5,538 24	28,096 50	42,145 30		14,048 80
Prints and varnish .....	2,379 72	3,253 19	7,124 84	3,430 88	22,759 80	19,893 95		4,775 61
Wine and spirits .....	4,283 05	8,102 72	6,864 54	7,538 21	31,382 10	183,373 65	10,764 68	
Cotton .....	22,395 63	40,411 42	71,016 84	49,648 03	160,867 89	22,631 97	144,868 23	
Sugar .....	117,019 86	15,378 13	11,222 15	123,670 12	160,959 73	74,063 97	90,866 43	
Hardware .....	11,689 33	53,064 50	186,173 61	54,280 64	422,553 52	448,295 27		25,741 95
Rice .....	116,494 27	656 98	121 66	1,931 46	2,096 05	19,444 87	7,516 38	
Oatmeal .....	4,689 75	2,339 78	3,596 34	1,931 46	10,199 02	3,272 64		10,302 77
Potatoes .....	2,981 44	9,110 09	1,450 22	5,289 62	19,134 55	29,437 32		80,325 99
Provisions .....	7,163 49	3,898 07	9,484 81	11,504 41	82,650 78	62,676 77		3,865 20
Hair .....	2,837 17	2,175 32	8,962 28	8,740 24	17,315 01	21,130 21		
Lead .....	8,078 39	24,225 44	6,204 76	81,601 47	120,119 23	31,444 89	88,665 17	
Cattle .....	10,078 66	120 53	3,518 48	5,604 61	19,383 58	29,377 89		9,994 11
Tea and coffee .....								

Fire-arms.....	155 73	180 06	102 20	403 92	559 05	3,079 54	.....	2,519 89
Drugs.....	399 05	681 31	3,742 84	2,949 10	3,630 41	7,681 70	.....	4,051 29
Batteries.....	832 17	.....	.....	1,435 62	6,691 44	4,712 35	1,979 09	.....
Enamel dials.....	189 79	.....	282 26	.....	472 05	690 61	.....	218 56
Elephants' teeth.....	3,756 94	5,742 47	.....	1,455 08	10,954 49	18,747 03	.....	7,792 54
Books and stationery.....	1,746 48	1,635 14	2,369 86	2,394 32	8,145 92	8,300 03	.....	154 11
Grindstones.....	1,778 64	783 51	.....	807 84	2,369 99	1,235 41	1,134 58	.....
Granite.....	1,265 29	1,936 87	1,484 28	.....	4,086 44	10,765 09	.....	6,078 65
Oil-cake.....	1,267 66	.....	.....	194 66	462 32	.....	462 32	.....
Jewelry.....	1,820 07	.....	6,511 38	2,623 04	10,954 49	1,429 44	9,525 05	.....
Gum and glue.....	1,635 14	.....	1,547 55	.....	3,182 69	3,848 10	.....	665 41
Speller.....	.....	3,946 73	3,990 80	1,747 07	9,674 60	6,900 05	2,774 55	.....
Ginger.....	.....	2,141 26	2,009 86	3,727 74	7,878 86	5,833 50	2,045 36	.....
Chronometer movements.....	.....	238 46	.....	238 46	238 46	238 46	.....	.....
Iron ore.....	.....	1,873 60	35,103 40	40,654 75	77,631 75	77,631 75	.....	.....
Ship chandlery.....	.....	10,501 91	.....	10,501 91	10,501 91	10,501 91	.....	.....
Plants and seeds.....	.....	155 73	637 51	3,528 21	4,321 45	18,013 56	.....	13,692 11
Tar.....	.....	.....	155 73	.....	155 73	155 73	.....	.....
Wax.....	.....	.....	214 13	214 13	214 13	214 13	.....	.....
Manganese.....	.....	.....	214 13	.....	214 13	.....	.....	.....
Knives.....	.....	.....	.....	277 39	277 39	277 39	.....	6,861 86
Brasswork.....	.....	.....	.....	335 79	335 79	.....	.....	.....
Cutlery.....	.....	.....	.....	18,113 11	18,113 11	233 59	17,879 52	.....
Straws.....	.....	.....	.....	.....	.....	236 46	.....	296 46
Silk waste.....	.....	.....	.....	.....	.....	2,376 54	.....	2,376 54
Tobacco.....	.....	.....	.....	.....	.....	111 93	.....	111 93
Dental goods.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	5,412,627 33	4,868,483 41	5,895,685 49	6,894,450 88	23,062,247 11	19,064,235 15	4,748,577 47	768,565 51
Total for the preceding year.....	5,645,638 44	4,582,156 98	4,320,315 79	4,536,123 94	.....	.....	.....	.....
Increase.....	.....	286,326 43	1,566,369 70	2,358,326 94	.....	.....	.....	.....
Decrease.....	233,011 11	.....	.....	.....	.....	.....	.....	.....
Net increase.....	.....	.....	.....	.....	.....	.....	3,978,011 96	.....

## LONDON.

*Report, by Consul-General Badeau, on the trade and commerce of London for the year 1878 and the year ending September 30, 1879.*

In accordance with the provisions of paragraph 380 of Consular Regulations, I have the honor to submit my annual statements respecting trade and navigation within the consular district of London.

Form D for this consulate-general shows an increase in the value of exports to the United States in every quarter of the year ending September 30, 1879, the total increase amounting to \$5,004,290 70.52 as compared with the year ending September 30, 1878, or rather more than 25 per cent.

The total value of British produce and manufactures exported from London in 1878 was \$234,229,672, being \$18,700,000 less than in 1877.

The total value of the imports at London in the year 1878 was \$661,376,546, being \$66,622,424 less than in 1877. The total amount of the duties received at London in the year 1878 was \$50,475,450, an increase over 1877 of \$1,600,000, and more than one-half the total gross amount of customs revenue for the United Kingdom.

The total value of the imports at London for 1878 is the smallest total annual value recorded for the past five years; it was, however, more than one-third of the total imports into the United Kingdom, and exceeded the value of imports at the second port of Great Britain, Liverpool, by \$158,599,000.

The number of vessels entered from foreign countries in 1878 was 11,383, with a tonnage of 5,345,281. The number of vessels cleared to foreign countries was 8,782; tonnage, 4,389,064. There was a decrease from the year 1877 of 772 vessels, and 339,419 tons entered, and of 181 vessels and 32,809 tons cleared. Of the above tonnage the proportion was two tons British for every ton foreign.

In the coasting trade the tonnage amounted to 4,071,172, an increase 50,000 tons over that of 1877.

Seventy-four American vessels entered the port during the twelve months ending September 30, 1879, against 103 in 1878.

The tonnage of American vessels entered during the same period was 84,924 against 104,487.

The value of merchandise imported in American bottoms for the year ending September 30, 1879, was about \$6,296,980; the exports in American bottoms, about \$1,229,885; for the preceding year the imports were about \$7,397,745, and the exports \$1,226,210.

The Bank of England rate of discount during the year ending September 30, 1879, varied as follows:

	Per cent.
October 1, 1878 .....	5
October 14, 1878 .....	6
November 21, 1878 .....	5
January 16, 1879 .....	4
January 30, 1879 .....	3
March 13, 1879 .....	2½
April 10, 1879 .....	2
November, 1879 .....	3

The agricultural season in the district of this consulate-general has been marked by continuous rain during the spring and summer, and the harvests were the poorest known for many years. The hop crop—so important in Kent County and a part of Surrey—was almost a total failure, a fact of consequence to those interested in hops in America.

The principal feature in the commercial condition of London during the present year is the revival in trade, which has now been continuous for some months. The invoices of goods passing through this consulate-general for the United States furnish an unfailing indication of the general condition of London, and almost of the kingdom. When trade with the United States is good, English business thrives; and the converse of the proposition holds equally. The export trade to America, which for years had been falling off, exhibiting last year a decline of over \$17,000,000 since 1873, or more than 52 per cent., began in the first six months of 1879 to revive, and it was not long before this was noted by close observers, with the hope that a favorable effect upon the general condition of British commerce and business might be experienced. The hope was quickly realized. In July there was apparent a slight improvement, which has kept pace with the continued increase of exportations to the United States; and at the present moment, when I am able to report an increase of over \$5,000,000 in the value of the invoices passing through this consulate-general, the condition of nearly all business enterprises and interests in London, so essentially the commercial metropolis of the kingdom, is far better than has been known for certainly two years. Indeed, the buoyancy at present is such that many are fearful it cannot be permanent. This whole subject will be found more fully treated in my report upon the condition of the United Kingdom, to which I beg respectfully to refer. Whatever is true in those respects of the country is equally or even more absolutely true of the capital.

ADAM BADEAU.

UNITED STATES CONSULATE-GENERAL,  
London, November 1, 1879.

*Statement showing the commerce at the port of London for the year ending December 31, 1878.*

IMPORTS.

Articles.	Quantities.
Animals, living:	
Oxen, bulls, and cows .....	number. 73, 156
Sheep and lambs .....	do. 736, 668
Bones (except whale-fins) .....	tons. 11, 549
Caoutchouc .....	cwt. 38, 196
Chemical manufactures and products .....	value. £390, 122
Cocoa .....	pounds. 13, 283, 285
Coffee .....	cwt. 1, 143, 577
Cotton, raw .....	do. 336, 446
Cotton manufactures .....	value. £419, 352
Dyes: indigo .....	cwt. 57, 011
Flax .....	do. 15, 838
Fruit:	
Currants and raisins .....	cwt. 930, 591
Oranges and lemons .....	bushels. 1, 331, 676
Glass of all kinds .....	cwt. 604, 927
Grain:	
Wheat .....	cwt. 11, 018, 104
Barley .....	do. 2, 342, 320
Oats .....	do. 8, 109, 393
Pease .....	do. 451, 137
Beans .....	do. 351, 664
Maize .....	do. 4, 599, 427
Wheat-meal and flour .....	do. 1, 486, 980
Gnano .....	tons. 47, 018
Hemp .....	cwt. 358, 944
Hides .....	pounds. 26, 381, 857
Hops .....	cwt. 63, 183
Horses .....	number. 11, 543
Jute .....	cwt. 1, 574, 715
Leather gloves .....	dozen pairs. 15, 494

*Statement showing the commerce at the port of London, &c.—Continued.*

## IMPORTS—Continued.

Articles.	Quantities.
<b>Metals:</b>	
Copper.....	tons 12, 925
Iron.....	105, 720
Lead.....	do 48, 413
Tin.....	cwt 327, 867
Zinc.....	do 475, 142
<b>Oil:</b>	
Train, blubber, and spermaceti.....	tons 6, 006
Olive.....	do 2, 813
Palm.....	cwt 36, 420
Seed, of all kinds.....	tons 1, 102
Oil-seed cake.....	tons 52, 477
Paper of all kinds (save hangings).....	cwt 554, 852
Petroleum.....	gallons 14, 354, 597
<b>Provisions:</b>	
Bacon and hams.....	cwt 362, 437
Beef, pork, and other meats.....	do 454, 389
Butter.....	do 306, 562
Cheese.....	do 251, 295
Eggs.....	great hundred 1, 289, 521
Fish.....	cwt 323, 947
Lard.....	do 28, 185
Potatoes.....	do 2, 357, 497
Pyrites of iron or copper.....	tons 35, 482
Rags and paper-making materials.....	do 25, 766
Rice.....	cwt 2, 657, 343
Salt-peter and cubic niter.....	do 708, 006
<b>Seeds:</b>	
Clover and grass.....	cwt 77, 762
Cotton.....	tons 28, 961
Flax and linseed.....	tons 585, 145
Rape.....	do 534, 831
Silk, raw.....	pounds 3, 900, 512
Silk manufactures.....	value £336, 722
Skins: Sheep and lambs'.....	number 7, 325, 334
<b>Spirits:</b>	
Rum.....	proof gallons 4, 467, 937
Brandy.....	do 2, 046, 973
Geneva.....	do 60, 235
Other unsweetened.....	do 1, 090, 646
<b>Sugar:</b>	
Unrefined.....	cwt 5, 317, 473
Refined.....	do 1, 268, 653
Tallow and stearine.....	do 345, 093
Tea.....	pounds 204, 680, 186
<b>Tobacco:</b>	
Unmanufactured.....	pounds 32, 792, 739
Manufactured.....	do 2, 182, 361
Cigars and snuff.....	do 9, 698, 933
Wine.....	gallons 9, 698, 933
<b>Wood and timber:</b>	
Hewn.....	loads 262, 170
Sawn or split.....	do 1, 038, 067
Staves.....	do 30, 113
Mahogany.....	tons 25, 526
Wool: Sheep and lambs'.....	pounds 323, 330, 639
Woolen yarn.....	do 353, 632
Woolen manufactures.....	value £565, 472

Total value, £128,696,104 or \$616,376,546; duties received thereon, £10,375,221 or \$50,475,450.

## EXPORTS.

## 1.—PRODUCE OF GREAT BRITAIN AND IRELAND.

Articles.	Quantities.	Value.
Alkali.....	102, 772	£36, 458
Apparel.....		2, 029, 647
<b>Arms and ammunition:</b>		
Fire-arms (small).....	number 89, 516	117, 979
Gunpowder.....	pounds 7, 271, 000	216, 121
Of all other sorts.....		354, 523
Bags and sacks, empty.....	dozens 1, 312, 886	446, 016
Beer and ale.....	barrels 233, 151	901, 330

Statement showing the commerce at the port of London, &amp;c.—Continued.

## EXPORTS—Continued.

Articles.	Quantities.	Value.
Books, printed .....	cwt. 34, 340	2371, 667
Butter .....	do. 1, 455	9, 245
Candles, of all sorts .....	pounds. 3, 270, 900	107, 978
Caoutchouc, manufactures of .....		167, 061
Chemical products or preparations .....		593, 944
Coal, cinders, and patent fuel .....	tons. 47, 670	40, 755
Cotton yarn .....	pounds. 41, 428, 900	1, 934, 410
Cotton manufactures:		
Piece-goods .....	yards. 611, 774, 000	8, 081, 275
Hosiery and small wares .....		875, 956
Earthen and china ware .....		350, 067
Fish, herrings .....	barrels. 20, 913	28, 140
Glass, of all kinds .....		377, 795
Haberdashery and millinery .....		1, 004, 372
Hardware and cutlery unenumerated .....		1, 037, 772
Hats of all sorts .....	dozens. 451, 029	550, 992
Leather:		
Unwrought .....	cwt. 57, 551	460, 503
Wrought .....		880, 518
Saddlery and harness .....		243, 909
Linen and jute yarn .....	pounds. 3, 415, 400	103, 229
Linen and jute manufactures:		
Linen piece-goods .....	yards. 19, 325, 800	627, 852
Linen thread and unenumerated .....		91, 657
Jute manufactures .....	yards. 30, 421, 200	345, 809
Machinery and mill work .....		1, 560, 698
Metals:		
Iron—		
Pig, bar, bolt, and wire .....	tons. 84, 143	643, 014
Railroad .....	do. 69, 131	565, 281
All other kinds .....	do. 171, 527	2, 923, 610
Steel, unwrought .....	do. 3, 050	86, 839
Copper—		
Unwrought .....	cwt. 15, 740	52, 667
Part wrought and wrought .....	do. 275, 540	929, 432
Lead and lead ore .....	tons. 22, 864	430, 150
Tin, unwrought .....	cwts. 67, 849	222, 400
Oil, seed .....	gallons. 5, 462, 400	644, 195
Painters' colors .....		624, 638
Paper (except hangings) .....	cwts. 259, 781	670, 514
Salt .....	tons. 28, 752	40, 920
Silk:		
Thrown, twist, and yarn .....		127, 354
Manufactures .....		601, 300
Spirits, British and Irish .....	gallons. 404, 698	126, 771
Sugar, refined .....	cwt. 55, 094	68, 435
Telegraphic wires and apparatus .....		481, 289
Wool, sheep and lambs' .....	pounds. 531, 900	47, 306
Woolen and worsted yarn .....	do. 234, 400	37, 704
Woolen manufactures:		
Cloths of all kinds .....	yards. 8, 247, 200	1, 568, 287
Worsted and mixed stuffs .....	do. 37, 763, 800	1, 777, 746
Flannels, carpets, &c .....	do. 11, 369, 800	854, 449
Hosiery and other goods .....		293, 305
All other articles .....		9, 797, 669
Total value .....		48, 145, 873
Total value in dollars .....		234, 229, 672

## 2.—EXPORTS OF FOREIGN AND COLONIAL PRODUCE.

Bacon and hams .....	cwt. 1, 886	
Bark, Peruvian .....	do. 30, 519	
Caoutchouc .....	do. 23, 969	
Cocoa .....	pounds. 7, 185, 189	
Coffee .....	cwt. 908, 894	
Cotton:		
Raw .....	cwt. 194, 633	
Manufactures .....		£162, 589
Dyes and dyeing-stuffs:		
Cochineal .....	cwt. 13, 887	
Indigo .....	do. 44, 209	
Flax, dressed and undressed .....	do. 1, 087	
Fruits:		
Currants .....	cwt. 211, 007	
Raisins .....	do. 61, 816	

Statement showing the commerce at the port of London, &amp;c.—Continued.

## EXPORTS—Continued.

Articles.	Quantities.	Value.
<b>Grain:</b>		
Wheat.....cwt.	767,501	
Wheat-meal and flour.....do.	44,812	
Gnano.....tons.	23,293	
Hemp, dressed and undressed.....cwt.	67,571	
Hides, untanned.....do.	316,848	
Jute.....do.	987,083	
<b>Metals:</b>		
Copper, unwrought and part wrought.....tons.	4,151	
Iron bars.....do.	48,602	
Tin, in blocks, ingots, slabs, and regulus.....cwt.	105,785	
<b>Oil:</b>		
Cocconut.....cwt.	80,244	
Palm.....do.	12,406	
Quickalliver.....pounds.	915,273	
Rice, not in the husk.....cwt.	1,518,600	
Saltpeter.....do.	23,263	
<b>Seeds:</b>		
Flax or linseed.....quarters.	24,498	
Rape.....do.	182,225	
<b>Silk:</b>		
Raw.....pounds.	289,143	
Thrown.....do.	6,679	
Manufactures.....		£100,893
<b>Spices:</b>		
Cinnamon.....pounds.	1,058,300	
Pepper.....do.	16,802,010	
<b>Spirits:</b>		
Brandy.....proof-gallons.	143,572	
Geneva.....do.	21,095	
Rum.....do.	1,243,693	
Other unsweetened spirits.....do.	192,019	
Mixed (in bond).....do.	236,232	
<b>Sugar:</b>		
Unrefined.....cwt.	200,698	
Foreign refined and candy.....do.	152,892	
Molasses.....do.	4,835	
Tallow and stearine.....do.	63,677	
Tea.....pounds.	39,991,002	
<b>Tobacco:</b>		
Unmanufactured.....pounds.	5,888,316	
Foreign, manufactured and snuff.....do.	787,847	
Wine.....gallons.	1,098,857	
Wool, sheep and lambs.....pounds.	126,913,426	

Statement showing the navigation at the port of London for the year 1878.

Flag.	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
British.....	7,461	3,706,346	5,281	2,897,456
Russian.....	172	66,446	135	53,367
Swedish.....	389	192,483	345	166,796
Norwegian.....	999	457,238	963	460,584
Danish.....	494	142,677	435	119,161
German.....	909	381,429	755	327,552
Dutch.....	374	80,204	361	76,428
Belgian.....	94	46,800	114	70,288
French.....	156	50,702	146	55,202
Spanish.....	119	52,279	103	44,214
Portuguese.....	5	919	6	1,349
Italian.....	95	58,425	46	27,530
Austrian.....	23	13,484	17	10,275
Greek.....	5	2,865	2	1,545
United States.....	86	92,105	69	76,109
Other countries.....	2	879	4	1,218
Total.....	11,383	5,345,281	8,782	4,389,064

*Statement showing the navigation, by countries, at the port of London for the year 1878.*

From or to—	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
<b>FOREIGN COUNTRIES.</b>				
Russia:				
Northern ports .....	1,267	541,706	343	141,571
Southern ports .....	74	60,935	4	3,741
Sweden .....	747	338,963	422	206,989
Norway .....	478	179,718	491	225,484
Denmark .....	123	31,828	628	209,895
Germany .....	1,349	618,379	924	441,915
Holland .....	818	298,145	780	295,233
Belgium .....	836	249,987	768	239,932
France .....	1,712	424,544	1,571	392,764
Portugal .....	51	17,324	125	71,556
Azores .....	50	14,997	22	9,944
Spain .....	276	143,585	99	36,997
Spanish West Indies .....	36	9,227	13	4,199
Philippine and Ladrone Islands .....	20	16,838		
Italy .....	140	71,328	51	25,778
Greece .....	36	23,129	3	1,904
Turkish Dominions .....	125	98,108	26	19,175
Morocco .....	51	11,962	16	4,445
China (exclusive of Hong-Kong and Macao) .....	112	138,581	15	12,179
Japan .....	12	10,405	13	8,118
United States .....	603	584,722	527	550,711
Mexico .....	38	13,887	18	5,665
South America .....	134	70,424	145	87,000
Other countries .....	70	29,381	120	51,312
<b>Total foreign countries .....</b>	<b>9,158</b>	<b>3,997,623</b>	<b>7,144</b>	<b>3,046,507</b>
<b>BRITISH POSSESSIONS.</b>				
Channel Islands .....	754	119,871	126	14,420
South African Colonies .....	71	59,378	202	133,291
British East Indies .....	451	535,839	305	420,520
Australia and New Zealand .....	267	290,889	423	450,699
British North America .....	204	161,054	200	148,644
British West Indies .....	305	99,921	172	56,995
Other possessions .....	173	80,706	210	117,988
<b>Total British Possessions .....</b>	<b>2,225</b>	<b>1,347,658</b>	<b>1,638</b>	<b>1,342,557</b>
<b>Total foreign countries and British Possessions .....</b>	<b>11,383</b>	<b>5,345,281</b>	<b>8,782</b>	<b>4,389,064</b>

*Statement showing the navigation coastwise at the port of London during the year 1878.*

**VESSELS ENTERED WITH CARGOES AND IN BALLAST.**

Description of vessels.	Number.	Tons.
Sailing .....	30,180	1,546,833
Steam .....	6,165	2,524,339
<b>Total .....</b>	<b>36,345</b>	<b>4,071,172</b>

**VESSELS CLEARED WITH CARGOES ONLY.**

Description of vessels.	Number.	Tons.
Sailing .....	8,038	507,664
Steam .....	1,943	896,234
<b>Total .....</b>	<b>9,981</b>	<b>1,403,918</b>



*Statement showing the value of declared exports from the consular district of London, England, to the United States during the four quarters of the year ending September, 1879.*

Articles.	Quarter ending—				Total for the year.
	Dec. 31, 1878.	Mar. 31, 1879.	June 30, 1879.	Sept. 30, 1879.	
Beer, wine, and spirits .....	\$117,044 11.04	\$69,843 68.36	\$85,405 08.78	\$573,514 02.40	\$845,806 90.58
Chemicals, soda, &c. ....	517,394 74.23	707,125 58.61	1,020,088 94.40	863,553 46.99	3,108,162 74.23
Books and stationery .....	346,071 84.03	287,535 71.58	307,509 51.17	416,645 43.81	1,357,822 50.59
Dry goods—silks, woollens, cottons, laces, &c. ....	331,831 53.51	917,850 50.21	361,901 85.51	1,128,170 68.49	2,739,854 06.72
Machinery and hardware .....	4,922 54.99	9,039 86.68	31,754 39.78	16,870 47.25	63,487 18.30
Iron, steel, metals, &c. ....	690,765 10.74	814,513 08.03	873,984 50.86	2,280,522 13.64	4,649,804 83.27
Leather, hides, skins, furs, &c. ....	494,446 84.27	464,232 06.22	801,633 25.95	1,263,896 25.47	3,024,208 41.91
Rags and paper waste .....	125,369 19.14	167,487 87.70	194,634 12.64	166,403 07.33	653,894 26.81
Wool .....	33,553 97.00	125,080 34.43	274,970 22.74	225,306 53.22	654,000 07.39
Raw silk .....	41,467 30.46	39,950 88.29	171,804 06.68	38,022 57.28	291,045 75.71
Tea .....	70,797 39.59	25,111 09.94	33,548 13.02	25,835 08.07	155,292 30.62
Clothing .....	7,533 09.87	8,487 35.85	39,559 49.46	22,083 30.40	78,263 25.58
Diamonds .....	278,707 31.41	319,421 02.08	430,817 19.49	596,593 56.25	1,625,539 09.23
Seeds .....	307 15.73	344 12.24	4,837 17.93	19,829 38.56	115,277 09.90
Feathers .....	60,181 0.45	33,429 52.96	226,357 19.74	154,906 92.01	544,509 19.73
Miscellaneous .....	59,822 64.76	103,422 43.22	1,233,340 35.28	540,345 03.47	4,630,452 46.54
Total, in United States gold .....	1,826,032 21.91	1,030,734 85.98	5,991,806 36.43	8,328,187 54.64	24,420,872 05.08
Total for preceding year .....	4,854,727 92.06	4,987,331 55.06	3,812,615 61.49	5,761,906 25.35	19,416,381 34.49
Increase .....	141,640 10.67	117,178 55.62	2,179,190 74.94	2,566,281 28.29	5,004,280 70.52

Compilation, from Forms D, 1878 and 1879, showing value of declared exports from this consulate-general to the United States for those years, also decrease or increase in the articles named.

Articles.	1878.	1879.	Increase.	Decrease.	Percentages of—	
					Increase.	Decrease.
					Per cent.	Per cent.
Beer, wines, and spirits.	\$232,409 87.42	\$415,806 90.58	\$523,307 03.16	\$335,012 91.17	+ 162	+ 94
Chemicals, soda, &c.	3,443,205 65.40	3,108,162 74.23	187,925 46.02		+ 14	
Books and stationery	1,180,897 04.57	1,337,822 50.59	216,048 60.23		+ 84	
Dry goods	2,523,808 06.49	2,739,854 66.72		53,756 92.02		- 46
Machinery and hardware	117,244 10.32	63,487 18.30				
Iron, steel, &c.	2,082,649 80.02	4,649,804 83.27	2,567,155 03.25		+ 123	
Leather, hides, skins, furs, &c.	2,054,637 95.43	3,024,206 41.91	969,570 46.48		+ 47	
Rags and paper waste	533,119 01.22	653,894 26.81	120,775 25.59		+ 234	
Wool	576,753 43.00	654,000 07.39	77,246 64.39		+ 13	
Raw silk	470,139 42.55	291,045 75.71		179,093 66.84		+ 38
Tea.	48,150 67.18	155,292 30.62	107,141 63.44		+ 222	
Clothing	31,169 14.70	78,263 25.58	47,154 10.88		+ 151	
Precious stones.	1,253,025 81.17	1,525,339 09.23	272,313 28.06		+ 214	
Hops.	1,686 46.53					
Seeds.	119,917 94.08	118,277 09.90		1,035 18.56		+ 61
Feathers.	685,504 65.93	544,509 19.73		1,640 84.18		+ 1
Miscellaneous	3,983,222 28.55	4,630,452 46.54	647,130 17.99	140,805 46.20		+ 204
Total	19,416,581 34.56	24,420,872 05.06	5,715,855 69.49	711,564 98.97		+ 16
						Net Increase, + 25

## SUMMARY.

Total for the year ending September 30, 1879	\$24,420,872 05.06	Increase in eleven articles	\$5,715,855 69.49
Total for the year ending September 30, 1878	19,416,581 34.56	Decrease in six articles	711,564 98.97
Net total increase	5,004,290 70.52	Net total increase	5,004,290 70.52

## MANCHESTER.

*Report, by Consul Shaw, on the trade, industries, wages, factory statistics for Lancashire and the United Kingdom), taxes, &c., of the district of Manchester, for the year ending September 30, 1879.*

## REVIEW OF TRADE.

The past year has been a period of doubt and gloom to Lancashire manufacturers, as a rule, and the present outlook affords little ground for the belief that the dawning of a brighter day is near at hand. The depression which has so long borne heavily upon the industries of England is not confined to any particular branch of trade, but it is general in its character.

Manufacturers have striven nobly to meet the discouraging phases of business—growing out of a falling off in orders on the one hand and the high price of cotton and the low price of their goods on the other—by increased vigilance in watching all the details, as well as by insisting upon an unavoidable reduction in the wages of operatives, and yet the result has been unsatisfactory and disheartening. The demand for cotton goods in Great Britain at present is not large, owing to the failure of crops and the consequent distress among farmers, while foreign orders come in slowly, and the production largely exceeds the consumption, under present conditions. Failures continue, and are on the increase. "Short time" is in force at many mills, and reductions in wages are announced on all sides. The profits of manufacturers of cotton goods are in all cases inadequate, and in a large percentage of the mills a positive loss has been made during the past year. Many feel that the vast manufactures of this district are passing through a crisis unequalled in the history of Lancashire, and what the end is to be or when it will be reached no one can now determine. All are bravely and resolutely exerting themselves to meet the exigencies of the present by resorting to every economical expedient, trusting that an increase of orders and an improvement in prices may speedily be realized.

Unless relief comes soon the weakest must fail, and those who are able to pull through will have the benefit of the decreased producing power. This painful process of elimination leaves unemployed operatives without either the means of providing for themselves here or the ability to emigrate; and charity will be compelled to extend a helping hand to many thousands during the coming winter. This discouraging state of affairs is the result, largely, of competition from abroad and a failure in crops at home. Rival manufacturers in other lands are becoming keen competitors, not only in their own, but in foreign markets; and English manufacturers, while still able to command a large percentage of the foreign trade in the East, have at the same time to accept small profits or yield part of their vantage ground to foreigners; so that, while manufacturers here in the main are able to produce goods at less first cost than most of their outside rivals, they are forced to put up with small profits to hold their own in the open markets of the world. This era of reduced profits, accompanied with ever strengthening foreign competition, has seriously affected English manufactures. Never before has the unrest and gloom been as general as it is now in this commercial center. Wages are very low, operatives are poor, the demand for textile fabrics is comparatively small, and the general tone of

trade is not at all satisfactory. The views I advanced in my last annual report pretty fairly, I believe, represent the commercial situation at the close of another disastrous year, on the whole, in this section of England. The commercial reports, which have daily appeared in the able press of Manchester, have reflected faithfully the state of trade; and it has been one long-continued story of high prices for cotton, low prices for goods, and a production always in excess of the demand.

The recent activity in the iron trade, caused almost entirely by orders from America, is exceedingly gratifying to producers here; and it is the first sign of improvement that has fallen to iron manufacturers for a long time past.

*Statement showing the value of declared exports from the consular district of Manchester to the United States for the four quarters of the year ending September 30, 1879.*

Articles.	December 31, 1878.	March 30, 1879.	June 30, 1879.	September 30, 1879.	Total.
Cottons .....	\$663,041 93	\$1,276,890 83	\$893,478 82	\$1,977,952 08	\$4,811,308 66
Chemicals .....	205,034 69	123,072 44	158,087 88	200,375 43	686,570 44
Rags and junk .....	163,953 64	155,846 19	157,179 79	132,992 22	609,971 84
Machinery .....	73,822 52	35,492 96	62,772 70	87,818 06	259,906 24
Worsted stuffs .....	50,558 59	114,673 69	25,129 60	67,399 82	257,761 70
Leather and hides .....	24,587 62	24,574 03	26,712 45	11,822 46	87,696 56
Wool .....	47,781 49	63,836 54	36,670 47	93,698 41	241,986 91
Linens .....	130,435 21	213,462 40	143,309 34	183,743 33	670,950 28
Hosiery .....	48,160 40	131,625 70	57,088 28	114,761 09	351,585 47
Carpets .....	20,378 71	6,032 49	1,803 28	25,853 74	54,068 22
Iron .....	25,269 35	35,541 38	22,514 65	23,634 48	106,959 86
Silk .....	52,158 62	51,378 21	19,613 45	39,042 95	162,193 23
Paper .....	7,139 88	6,695 15	7,856 05	5,846 40	27,537 48
Steel .....	5,375 41	10,501 86	13,448 42	13,601 24	42,926 93
Rugs, mats, and miscellaneous.	143,607 89	138,892 88	82,235 37	128,288 96	443,020 10
Totals, 1879 .....	1,661,305 95	2,388,516 75	1,657,795 55	3,106,825 67	8,814,443 92
Totals, 1878 .....	1,697,665 67	2,801,387 29	1,340,550 61	2,337,332 96	8,176,886 53
Increase .....			317,244 94	769,492 71	637,557 39
Decrease .....	36,359 72	412,820 54			

The above exhibit shows an increase in the exports for 1879, as compared with those of 1878 of \$637,557.39. During the first half of the fiscal year, and up to March 31, 1879, the decrease was \$448,180.26; but the increase during the last half of the year up to September 30, 1879, amounted to \$954,802.10.

#### RATES OF WAGES.

The following data, giving the rates of wages in several of the chief centers for manufactures in Lancashire, has been prepared by a gentleman connected with the trade, and can be accepted as reliable. The "wage-list" has been based upon the prices paid in the near past, and present wages will be shown in the reductions noted. The gentleman who prepared the same, writes that "the following information may meet your want. You can rely upon its being as fairly correct as possible. The inclosed price-list of 'Oldham and other shares' is from the Oldham Chronicle of last week. It is the best information of the kind you can have."

*Average earnings per day of the operatives in an East Lancashire cotton-weaving mill.*

[Hours of labor, 56 per week.]

		At present subject to a reduction of—
Weavers, 3 looms.....	\$0 64 to \$0 72	} 20 per cent.
Weavers, 4 looms.....	80 to 96	
Weavers, 6 looms.....	1 20 to 1 44	
Weavers, children, half-timers .....	14	
Beamers or warpers .....	64 to 80	20 per cent.
Winders .....	40 to 72	10 per cent.
Tapers or sizers .....	1 20 to 1 68	5 per cent.
Tacklers or overlookers .....	1 12 to 1 68	15 per cent.
Engine-drivers and firemen .....	96 to 1 68	5 per cent.

*Average earnings per day in an Oldham cotton-spinning mill.*

[Hours of working, 56 per week.]

Mule overlooker.....	\$1 60 to \$2 00	} Now working at 15 per cent. reduction on these rates.
Carder.....	1 80	
Jobbers.....	96	
Drawing and slubbing hands .....	72 to 84	
Intermediate and roving hands .....	68 to 84	
Little tenders (full-time).....	36	
Little tenders (half-time).....	16	

*Average earnings per day in a Blackburn cotton-spinning mill.*

[Hours of working, 56 per week.]

Present rates of wages—		
Spinning master and carders.....	\$1 20 to \$2 00	
Spinner .....	1 20 to 1 40	
Piercers.....	46 to 52	
Creelers.....	28 to 34	
Rovers.....	58 to 66	
Slubbers .....	50 to 54	
Drawers .....	52	
Grinders .....	72	
Blow-room hands.....	48 to 72	
Engine-drivers .....	84 to 2 00	
Firemen .....	64 to 84	

The employments represented by the lower rates of wages (say from 28 to 72 cents) are filled chiefly by women, girls, and boys.

It may be a matter of interest to mention that in Howarth's mill, one of the largest and most complete in all Lancashire, where some 2,500 operatives are employed, 70 per cent. of these are women; 40 per cent. of the women are under 20 years of age and 10 per cent. of them are under 15.

**WAGES OF CARPENTERS AND MASONS.**

Carpenters and masons are paid by the hour. The former receive 18 cents and the latter 17 cents an hour. Laborers, attending masons and bricksetters, are paid on an average 11 cents an hour. Owing to the wet and frosty weather, only about ten and a half months' work can be relied on by masons, bricksetters, and their assistants.

**WAGES OF FARM LABORERS.**

These, also, are employed by the day, and much "lost time" results from bad weather. Wages range from 48 to 66 cents per day. Ten hours is the average day's work; but in the busy seasons they work much longer time, without, however, any increase of wages. The laborer

is obliged to board himself, excepting that a small sandwich made of dry bread and cheese, along with a glass of beer, is dealt out to him twice a day, and three times if he works late in the evening.

## HOUSE RENTS.

Operatives and farm laborers pay about the same rates for house rents, and these range from 72 cents to \$1.50 per week. An excellent class of houses is provided as a rule, and the sanitary arrangements are generally admirable.

## RETAIL PRICES OF PROVISIONS.

The following list comprises the principal food of operatives and farm laborers :

Bread.....	for a loaf of 4 pounds..	\$0 15
Sugar.....	per pound..	05 to \$0 07
Tea.....	do.....	44 to 60
Coffee.....	do.....	28 to 35
Butter.....	do.....	20 to 35
Fresh meat.....	do.....	13 to 25
Bacon.....	do.....	10 to 18
Cheese.....	do.....	14 to 18
Eggs.....	per dozen..	30 to 60
Potatoes.....	per pound..	02
Cabbage.....	each..	04 to 06

All vegetables are comparatively dear.

## ENGLISH TAXES, LOCAL AND GENERAL.

The following statements of actual taxes paid by several mill-owners in Lancashire will furnish a pretty good idea of what local and general burdens are borne by manufacturers in this district. A cotton-mill at Eccles, near Manchester, of 18,800 spindles, spinning 4s. to 14s., paid as follows :

	1875.	1876.	1877.	1878.	Total average 4 years.	Total per annum.
Local rates and ground rent.....	\$686 49	\$643 59	\$772 39	\$772 39	\$2,874 75	\$718 67
Government taxes.....	57 22	70 38	107 71	98 53	353 84	85 46
Total.....	743 71	713 97	880 10	870 92	3,208 59	802 12

Average of four years, \$802.12.

A mill at Bolton (10 miles from Manchester), of 72,000 spindles, spinning 30s. to 120s., paid for 1878 as follows :

Gas expenses.....	\$1,200 00
Water expenses.....	500 00
District and poor rate.....	1,800 00
Ground rent.....	500 00
Government taxes.....	200 00
Total for year 1878.....	4,200 00

A mill at Burnley, making India goods, of 20,000 spindles and 400 looms, paid for 1878, in taxes :

For gas.....	\$600 00
For water.....	25 00
District and poor rate.....	400 00
Ground rent.....	275 00

Total for local burdens only..... 1,300 00

A mill near Oldham (13 miles from Manchester), of 24,000 spindles and 484 looms, making heavy domestic goods, paid for *local burdens only*, as follows:

Gas expenses.....	\$750 00
Water expenses.....	30 00
District and poor rate.....	405 00
Ground rent.....	345 00

Total..... 1,530 00

Government taxes to add.

A cotton-mill at Stockport (6 miles from Manchester), containing 21,000 spindles and 800 looms, paid for local burdens only for 1878:

Gas expenses.....	\$1,000 00
Water.....	25 00
District and poor rate.....	700 00
Ground rent.....	450 00

Total..... 2,175 00

Government taxes to be added.

Every mill is subject to what is termed a "property tax," which for the last three years has been at the rate of *five pence per pound* on the assessed value of the mill. In 1875 it was three pence, and in 1874 two pence on the pound, and varies according to local and general needs. The income tax, based on the average profits of three years last past, also pays same tax as that assessed on the property value. Owner's house is subject to a tax of nine pence per pound on assessed value—*i. e.*, upon the basis of the *rent it will bring*.

#### FACTORY STATISTICS.

The following returns, covering the number of factories, the number of operatives, and other very important data, are taken from the government inspector's report under the factory and workshop acts, and include the year 1878.

The returns of cotton factories in Lancashire are as follows:

Number of factories.....	753
Total number of spinning spindles.....	18,679,862
Total number of doubling spindles.....	1,941,342
Male children, half time.....	7,664
Female children, half time.....	5,745
Males under 18, full time.....	10,014
Females above 13, full time.....	48,239
Males above 18.....	29,579
Total employed, males.....	47,257
Total employed, females.....	53,984
Total persons employed.....	101,241

#### *Weaving only (Lancashire).*

Number of factories.....	646
Number of power-loom.....	203,809
Children, half time, males.....	4,748
Children, half time, females.....	7,381
Males under 18, full time.....	5,102
Females above 13, full time.....	55,042
Males above 18.....	22,932
Total males.....	32,782
Total females.....	62,423
Total persons employed.....	95,205

*Spinning and weaving.*

Number of factories .....	490
Number of spinning-spindles .....	11,882,919
Number of doubling spindles .....	244,272
Number of power-looms .....	220,338
Children, half time, males .....	10,324
Children, half time, females .....	13,351
Males under 18, full time .....	11,801
Females above 13, full time .....	87,961
Males above 18 .....	42,371
Total males .....	64,496
Total females .....	101,312
Total persons employed .....	165,808

*Unenumerated.*

Number of factories .....	87
Children, half time, males .....	41
Children, half time, females .....	78
Males under 18, full time .....	83
Females above 13, full time .....	1,639
Males above 18 .....	545
Total males .....	669
Total females .....	1,717
Total persons employed .....	2,386

The above statistics show that there are 1,976 cotton manufactories employing 364,640 operatives, in this consular district. Some idea may thus be formed of the enormous wealth created by this colossal industry, and of the invaluable source of benefit it is to so many thousands who are directly and indirectly supported by it.

## RETURNS OF TEXTILE FACTORIES FOR GREAT BRITAIN.

The government returns just published give the fullest particulars of the textile factories in Great Britain, and a summary is herewith included as a matter of general interest to our manufacturers. I am indebted to the Manchester Guardian for the compilation of this table, and it is brought down to October, 1878:

	1878.	1875.	1871.
<b>Cotton:</b>			
Number of factories .....	2,674	2,655	2,483
Spinning-spindles .....	39,527,920	37,515,772	34,965,221
Power-looms .....	514,911	463,118	440,676
Work people .....	482,903	479,515	450,087
<b>Woolen and shoddy:</b>			
Number of factories .....	1,869	1,925	1,949
Spinning-spindles .....	3,421,309	3,266,703	2,664,979
Power-loom .....	59,054	58,527	50,830
Work people .....	139,423	138,053	128,946
<b>Worsted:</b>			
Number of factories .....	693	692	630
Spinning-spindles .....	2,096,820	2,182,792	1,821,144
Power-loom .....	87,393	81,747	64,650
Work people .....	130,925	142,097	109,857

The above statistics show that out of 2,674 cotton factories in Great Britain 1,976 are located in Lancashire; and while the whole number of cotton operatives is 482,903, there are engaged of this vast army in Lancashire alone 364,640.



## WHY LANCASHIRE IS THE CENTER OF THE COTTON INDUSTRY.

There are two chief reasons why this part of England is specially adapted to the cotton industry.

First. The humidity of the climate in Lancashire is peculiarly favorable to the working of cotton advantageously. It has been proved that the moisture imparts elasticity to the cotton, so that it can be worked much better, and it also increases its weight. Inasmuch as cotton cloth is sold by weight, as well as by the yard, this is an important element in its manufacture. Besides, this natural moisture cannot be secured by artificial means, or, at least, so far all attempts in this direction have in great part failed; and it is absolutely necessary in spinning the finest yarns. The influence of the weather on the output of a cotton-mill during a rainy week is very surprising. The actual saving is sometimes as high as 20 per cent.; and this arises solely from the effects of the damp atmosphere upon the cotton and its working.

Secondly. The cleverness and skill of the operatives in this district is another strong point in its favor. It is a center which attracts and educates the most skillful factory operatives to be found in the world. This comes largely from the fact that families follow each other in the eternal round of the factory, and father and son are content to pass their lives in the same mill. This is the beginning and the end of their ambition. As a result of this fixedness of purpose and taste a genius among factory hands is developed, for children are early accustomed to machinery, and, as they grow up in the mill, long experience makes them specially keen and expert in manipulating the various delicate operations through which cotton passes in its marvelous course from the bale to the finest fabrics.

Experience has demonstrated that the cotton trade does not thrive within the United Kingdom outside of a section of which Manchester is the center; and the reasons for this are found in the climatic influence, and the great skill and deftness of Lancashire operatives.

## PRESENT DEPRESSION.

As an index of the hard times prevailing in the cotton trade at present the following facts are important: Out of 125 "cotton spinning and manufacturing companies" mentioned in the Oldham Chronicle 1 paid a dividend for the last quarter of 2 per cent.; 1, of 2½ per cent.; 2, of 4 per cent.; 6, of 5 per cent.; 1, of 5½ per cent.; 2, of 8 per cent.; 5, of 10 per cent.; while 104 paid *no dividends*, and, in a great majority of cases, made losses more or less serious. In fact, for fifteen months past the returns have been about the same.

## STRIKES.

In my last annual report I stated that "the increasing financial distress among mill-owners is gradually allaying the discontent among operatives," and the result has proved that this view was well founded. Owing to "bad trade" the operatives in this consular district have submitted to further reductions during the past year, aggregating over 15 per cent., without resorting to a strike to resist them.

In fact, so many mills are working on "short time," and the number closed is so considerable, that there is no difficulty in securing operatives at the low rate of wages now in force. Moreover, the dull times have affected the finances of the trades unions connected with the cotton in-

dustry, and they are not in a position to long withstand the drain which a strike of any considerable magnitude would cause upon their resources.

And, also, it must be admitted that the operatives have shown great patience in their present difficulties, and a commendable willingness to accept their full share of the burdens which the long-continuing depression has thrown upon the cotton interests of this country. Low wages have led to more temperate habits among operatives, and less drink means happier homes and happier lives.

#### AMERICAN BEEF AND MUTTON.

During the past year a large and increasing trade in American fresh meats has been carried on in and about Manchester. It is becoming very popular, and comes to hand in excellent condition. There is a lack of system, it would seem, in providing suitable centers in various parts of Lancashire, in the more thickly-populated sections, where our meats could be had at retail, and at reasonable prices. To illustrate: American exporters, on an average, receive from 8 to 10 cents a pound for dead meat. It is retailed in shops here at from 12 to 25 cents per pound. Better methods might be easily provided for furnishing cheaper meats to the multitude; and a low price means an enormous increase in its consumption; thousands would eat meat who now seldom do so because of its high price. As a rule, operatives only have meat once a day, and often only two or three times a week, while many farm laborers do not taste it from one week's end to another. In this respect there is a marked contrast between English operatives and farm laborers and our own. American operatives not only live far better, in the variety of food consumed, but at less cost also.

#### AMERICAN BUTTER AND CHEESE.

There is no good reason why American butter and cheese should not command the highest prices in the English markets, when prepared carefully and expressly for them. At present such is not the case. Irish and Danish butter is not only preferred to our own, but commands a much higher price; in most cases from 15 to 20 per cent. in advance of what ours sells for.

The reason for this lies in the fact that weekly shipments are made direct from the farm, and the butter comes to hand fresh and new. Regular weekly shipments from the United States, coupled with special attention to salting lightly and with the purest salt, in connection with English agencies for distributing it cheaply and promptly, would insure, not only a better price, but a largely-increased demand. American cheese has won its way in this country to a strong market, and it is very popular. What is true as regards our meat and butter, however, holds good as to our cheese, so far as the present price of the same is concerned. Middlemen in England now pocket a large percentage which American producers might secure, under a wise and comprehensive system of commercial agencies in this country, in connection with American exporters.

#### EMIGRATION.

The conviction is rapidly gaining ground that a large emigration must take place to relieve the overstocked labor market in England. Frequent letters appear in the daily press setting forth the attractions of various countries as desirable points to which intending emigrants

may go, and there is evidently great interest taken in the question. During the past year there has been a large increase as compared with recent years, in the number of emigrants who have left England to seek new homes in other lands, and the prospect is that the number will be greatly exceeded in the year to come. Numerous applications are constantly being made to this consulate for information respecting various sections of the United States, and the special and general advantages peculiar to the same.

The present is a good time for those interested in securing a most desirable class of new settlers to place in the hands of intending emigrants here reliable data, setting forth fully the material facts about the climate, price of land, soil, water, location, markets, nearness to railroads, &c., to the end that these may become familiar to all who are now carefully examining such essential particulars.

Agents are already in the field representing the Dominion of Canada, Australia, and New Zealand, and, as a matter of course, they take pains to make these countries appear especially attractive, and, naturally, do not strengthen any predelictions of would-be emigrants in favor of the United States.

Owing to exceptional circumstances, the present is a most promising opportunity for presenting the advantages which the United States offer to Englishmen who are desirous of removing to a country where land is cheap, and where the climate is admirably adapted for grain raising.

The astonishing development of the fresh-meat trade from America, coupled with the increasing popularity of American butter and cheese, has seriously embarrassed English farmers. Heretofore these sources of profit have been most certain and valuable to them, and enabled the payment of high rent for land. But now the vast volume of fresh meat, butter, cheese, and other provisions coming from America, has completely revolutionized the price of these important farm products in England. The result is, that many English farmers, with more or less capital, are contemplating emigration, in the belief that they can better their condition by so doing. I need not point out that this class, composed of strong, capable, and industrious people as they are, and with from one to ten thousand dollars in cash, in many cases, are the right kind of men to help develop a new country, socially, morally, and generally.

Emigration agents should be selected with great care, and only such as are familiar with the English people should be sent out. As a rule, some resident American of known character and standing abroad would accomplish more than any non-resident possibly could, for the reason that adventurers in the past have, in some instances, unscrupulously deceived emigrants, and strangers, consequently, find it uphill work to make people believe their representations. This subject is one of great importance to the undeveloped States of our Union, and prompt action will be wise action on the part of our people who are now anxious to secure the best class of emigrants to settle in our country.

There can be no question but that a very large emigration must soon take place from Great Britain. Lord Derby recently stated, in a very able public speech, that 5,000,000 could profitably seek new homes elsewhere, to their own advantage and to the relief of those remaining. Enormous as this sum total is, a careful study of the situation in this kingdom leads me to believe that Lord Derby is wiser than his critics.

It is our privilege to attract a portion of this intending emigration to our shores, if we can do so by fair and true representations, as we un-

doubtedly can, if prompt and timely steps are taken by those in authority to inform Englishmen of the undoubted advantages we can offer them; in many ways, to become residents in a country not very far distant from their own, and which has so much in common sympathy with the civilization they are about to leave.

ALBERT D. SHAW.

UNITED STATES CONSULATE,  
Manchester, November 15, 1879.

---

### NEWCASTLE-UPON-TYNE.

*Report, by Consul Jones, on the commerce and industries of Newcastle-upon-Tyne and its trade with the United States—1879.*

#### AMERICAN VS. BRITISH AGRICULTURE.

There are reasons for believing that the long-continued period of depression has at last touched low-water mark, and that the tide of prosperity has commenced to flow. Men of great commercial experience maintained throughout the hard times that a revival of trade should come from the United States, and their prediction has proved true. But no one prophesied that the producing States of the West would carry panic into the ranks of landlords and tenants in the United Kingdom; such, however, has been the case. Cumberland bacon, Cheshire cheese, Aberdeen and Durham cattle and beef are everywhere undersold by importations from the United States. People are beginning to lose faith in the economic teachings of Cobden and Bright. Land-owners and farmers are clamoring for protection or reciprocity, and new theories in political economy find utterance every day. At a meeting held in this town a few evenings ago for the extension of university education, where Professor Moorsom, of Cambridge, delivered the first of a series of lectures on political economy, Charles Mark Palmer, esq., M. P. for North Durham, submitted the novel proposition contained in the following extract from his speech. The honorable member said:

In the midst of those discussions an attack had been somewhat made upon those countries which ventured to put high duties upon their [English] manufactures or exports. He was glad to see present a representative of the great country which had been very much complained of; he meant the consul of America. [Applause.] A great complaint was being made with reference to the duties on our goods, and that there was no system of reciprocity. For his part he would like to hear from the lecturer his opinions on it. He would, therefore, bring forward his opinions which might be at variance with those of previous speakers upon the great question of the policy of America, and whether it was in our interest. It might be a bold statement to make whether it was not in our interest that America upheld those high duties. They must remember that America had everything within itself of mineral wealth, and they had a soil more productive, a finer climate, and everything that could tend to the cheap production of the first produce. It had cheap carriage, and America was now exporting largely to this country manufactured goods. Now America, having its raw material of cotton, its coal, its iron, and other material, why should it not completely cover the whole world with its manufactures? It was simply because, in the first place, it put such large duties upon many of the necessities of life; at least it put large duties upon articles of consumption among the people, so that the rate of wages was enhanced to such a degree that a workman was not able to live on the wages that an English workman got. It, therefore, placed them at a disadvantage in the cost of labor. They had heard a great deal of the cost of labor in America, and there was no doubt that if labor in America could be brought down to the same price as we had it

in this country, and which could only be done by the removal of all the duties from all the articles which they could not manufacture, and which necessarily flow to the country to some degree, we would find that they would be able by their own ingenuity, by their machinery, and with the means within their power, to manufacture quite as cheaply as we do. What would be the effect if these articles were free from duties that were now taxed in America? It would bring down the cost of production and wages, and men would be able to live as well upon the same rate of wages as the workmen of this country. He put those questions for the learned professor to explain. Would they not be able almost to monopolize the whole of the trade of the world, seeing that they had advantages which we had not? [Applause.] He had read a powerful letter by a friend of his, Sir Edward Sullivan, yesterday, and he said that nothing but reciprocity would save this country. He did not believe that. [Applause.] He believed America was but ruining itself and keeping itself back, and when the time came when the enlightenment of America was brought before them and they opened their ports to reduce the cost of living, depend upon it they would be able to flood the whole world with their manufactured goods, much to our prejudice. [Applause.]

Mr. Palmer, being wrong in his premises—as every well-informed American must know—his conclusions fall to the ground. I might go on quoting quaint and curious theories advanced by public men of high and low degree for the benefit of agricultural interests in this country; but I look in vain for a proposition to lower the rent; and this is the only remedy that can effect a cure of existing evils. To lower the rent would mean ruin to many an English landlord.

The extent of the failure of the harvest in this country has probably been exaggerated in newspapers and reports. The hay crop has been heavy, and, speaking of the country at large, well harvested. In the south and west of England the corn crops have been ruined by heavy and continuous rains. Where the harvest comes later in the season—in the north of England and Scotland—there will be nearly an average crop. At present the weather is excellent and the farmers are hopeful.

#### THE IRON AND COAL TRADE.

This trade has been severely tested during the last twelve months. As shown in my special report, dated 17th of June, of this year, failures have been numerous and heavy. Until within the last few weeks uninterrupted falling markets have prevailed; and several strikes against a reduction of wages, attended by suffering and starvation, have taken place during the year just closed.

The shipment of pig iron from the Tees to foreign countries during the past nine months of 1879 have been 299,933 tons, against 265,840 tons during the corresponding period of 1878. The coastwise shipments for these nine months (ending September 30, 1879) have been 292,371 tons, against 326,125 tons during the corresponding period of 1878. The falling off in the coastwise shipments of 33,764 tons is more than counterbalanced by the increase of 34,093 tons sent over sea. The total exportation of pig iron from the Tees from January to September, 1879, inclusive, amounts to 592,304 tons; and during the corresponding nine months of 1878 to 591,975 tons; difference in favor of 1879, 329 tons. A sudden revival in the iron trade has set in, consequent upon large orders received from the United States. The Cleveland iron masters' stocks have decreased by twenty-nine thousand tons during the month of September; and so satisfied are the makers that the revival of trade is natural and healthy and that prices will continue to improve, that many of the leading firms are making arrangements to blow in more blast furnaces. The finished iron trade is also improving with advanced prices. Plates have risen 10 per cent. a ton within a week. Ironstone, coal, and coke also have an upward tendency.

The following table shows the total shipments of iron from Middlesboro' during last quarter and the corresponding periods of 1877 and 1878:

Months.	1879.	1878.	1877.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
July .....	61,825	78,642	70,294
August .....	61,489	73,275	72,692
September .....	101,145	66,936	76,447
Total .....	224,447	218,853	219,433

The foregoing figures show the satisfactory improvement that has already set in. The return for the current month will undoubtedly show further increased exports.

The year ending December 31, 1878, shows a decreased output of coals in the United Kingdom, when compared with the preceding year, of over 2,000,000 tons, valued at £700,000. More than one-half of this entire deficit falls upon the counties of Northumberland and Durham. These figures and the tables which follow these observations show that in the coal trade this district has suffered greater adversity than either Scotland or Wales. The total shipments of coals from the United Kingdom—coastwise and over sea—shows an increase during 1878 of about 266,000 tons over the preceding year, whereas this northeastern district shows a decrease of about 171,000 tons during corresponding periods—the ports of the Tyne (Newcastle, North Shields, and South Shields) sustaining 71,671 tons of the deficit.

Three years ago 77,092 men found employment in the Durham coal mines, and 24,403 in those of Northumberland, making a total of 101,495. On the 30th of September just past the number of men employed in the two counties were: Durham, 70,925; Northumberland, 21,580. Total, 92,405 men. Showing a falling off since 1876 of over 9,000 men.

The average price received at present for all coal raised in Northumberland is 4s. 7.96d. against 5s. 2d. per ton last year; and in Durham 4s. 8.16d. against 5s. per ton last year. The improvement in the iron trade communicates a slight improvement in the coal trade; but it is an undoubted fact that pits are now being worked at a loss to the owners. The average prices of coal are ascertained from the number of tons raised to the pit heads and the amount of money received from the sale of the same; no deduction is made on account of coal furnished to men engaged in the pits, who receive house and coal as part of their wages.

EVAN D. JONES.

UNITED STATES CONSULATE,  
Newcastle-upon-Tyne, October 1, 1879.

## 1.—Return of the mineral produce of the United Kingdom for 1878.

Minerals.	Quantities.		Value.		
	<i>Tons. cwt.</i>		<i>£.</i>	<i>s.</i>	<i>d.</i>
Coal .....	132,607	866 0	46,412	753	0 0
Iron ore .....	15,726	370 1	5,609	507	0 0
Tin ore .....	15,045	14	530	737	0 0
Copper ore .....	56,094	0	201,434	6 11	
Lead ore .....	77,350	0	801,428	0 0	
Zinc ore .....	25,438	2	80,565	12 4	
Iron pyrites .....	29,867	15	19,009	5 10	
Manganese .....	1,586	4	3,120	17 2	
Silver ore .....	94	9	5,904	11 10	
Nickel ore .....	98	18	618	17 0	
Wolfram .....	10	0	100	0 0	
Uranium .....	0	8	44	0 0	
Ocher and umber .....	4,414	17	4,088	11 11	
Arsenic .....	4,991	10	26,900	18 7	
Fluor spar .....	391	17	133	0 0	
Clays (porcelain, potters', and fire clay) .....	2,711	486 0	677,871	10 0	
Salt .....	2,682	930 0	1,341,465	0 0	
Barytes .....	22,435	16	36,686	4 1	
Sundry minerals, including shales, gypsum, calc spar, coprolites, and phosphates, &c. ....	778,029	0	512,000	0 0	
Total value in 1878 .....			56,264,495	10 8	
Total value in 1877 .....			58,398,071	10 5	
Decrease .....			2,133,575	19 9	

## 2.—Return of coal and iron produced in the United Kingdom during 1877 and 1878.

Minerals.	Tons.		Value.		Decrease.	
	1877.	1878.	1877.	1878.	Quantities.	Value.
Coal .....	134,610,763	132,607,866	<i>£. s. d.</i> 47,113,767 0 0	<i>£.</i> 46,412,752	<i>Tons.</i> 2,002,897	<i>£. s. d.</i> 701,014 0 0
Iron ore .....	16,692,802	15,726,370	6,746,668 8 11	5,609,507	866,432	1,137,161 8 11

## 3.—Pig iron manufactured.

	<i>Tons.</i>
Iron ore.—The total quantity of iron ore raised in the United Kingdom amounted to .....	15,726,370
Foreign ores imported .....	1,173,411
"Purple ores" from pyrites imported .....	400,000

Total quantity of iron ore returned as smelted in Great Britain .... 17,299,781

## Number of furnaces in blast.

England .....	344
Wales .....	60
Scotland .....	94
Total .....	498

## Pig-iron produced and coal returned as used in its manufacture in the year 1878.

	Pig iron.	Coal.
	<i>Tons.</i>	<i>Tons.</i>
England .....	4,714,824	10,184,396
Wales .....	764,227	1,683,096
Scotland .....	902,000	2,244,813
Total .....	6,381,051	14,112,305

## 4.—Iron exported from the Tyne during the year ending December 31, 1878.

Description.	Quantities.					
	Foreign.	Coastwise.	Total 1878.	Total 1877.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Pig-iron .....	31,451	2,461	33,912	34,205	.....	.....
Iron castings .....	8,073	15,555	23,628	13,667	.....	.....
Bar-iron and rails .....	5,641	2,781	8,422	8,975	.....	.....
Plates, sheets, and angles .....	5,947	8,435	14,382	18,249	.....	.....
Bolts, nuts, nails, and iron work .....	502	1,739	2,241	2,339	.....	.....
Anchor and chains .....	1,339	601	1,940	4,774	.....	.....
Machinery and bridge work .....	3,054	3,341	6,395	8,491	.....	.....
Steel and steel rails .....	825	57	882	598	.....	.....
Wire and wire rope .....	37	503	540	502	.....	.....
Scrap iron .....	1,341	1,938	3,279	1,845	.....	.....
Total .....			95,621	93,645	1,976	.....

## 5.—Pig and other iron imported into the Tyne during the year ending December 31, 1878.

Whence imported.	1878.	1877.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
Germany .....	1,851	2,483	.....	.....
The Netherlands .....	4,362	4,109	.....	.....
Norway, Sweden, and Denmark .....	12,532	14,265	.....	.....
France and Algeria .....	46	.....	.....	.....
Russia .....	50	.....	.....	.....
Spain and Portugal .....	442	.....	.....	.....
Total foreign .....	19,073	20,867	.....	1,794
Coastwise .....	61,426	61,646	.....	220

## 6.—Coal produce in Northumberland and Durham.

Number of collieries—370 in 1878; 379 in 1877:

	Tons.
1877 .....	31,210,400
1878 .....	30,133,884
Decrease .....	1,076,516

## 7.—Shipment of coal from the United Kingdom in the years 1877 and 1878.

Description.	1877.	1878.	1878.	
			Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.
Coal sent, foreign .....	14,830,899	14,998,527	167,628	.....
Coke sent, foreign .....	333,640	274,239	.....	59,401
Patent fuel, foreign .....	205,511	221,367	15,856	.....
Coal sent, coastwise .....	10,949,151	11,048,146	98,995	.....
Coke sent, coastwise .....	18,353	9,951	.....	8,402
Patent fuel, coastwise .....	13,607	15,078	1,471	.....
Total .....	26,349,161	26,567,308	218,146	65,803



8.—Summary showing the total quantities of coal and coke sent from the ports of Northumberland and Durham, and from Middlesborough, in 1878.

Ports.	Coastwise.		Foreign.	
	Coal.	Coke.	Coal.	Coke.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Newcastle .....	2,398,470	3,387	3,343,855	166,083
North Shields .....	9,063	.....	210,384	3,006
South Shields .....	157,404	.....	263,593	301
Blyth .....	39,122	.....	155,899	.....
Amble .....	45,571	.....	52,298	.....
Sunderland .....	2,023,370	1,375	1,141,821	8,558
Seaham .....	535,442	10	594,351	24,067
Hartlepool .....	568,170	160	44,990	.....
Stockton .....	.....	.....	30	.....
Middlesborough .....	47,966	991	31,309	30,461
Total .....	5,824,578	5,923	5,838,530	232,476
Total, 1877 .....	5,882,502	8,379	5,951,775	274,945
Decrease .....	57,924	2,456	113,245	42,469

9.—Coal and coke exported from the ports of the Tyne (Newcastle, North and South Shields).

	1875.	1876.	1877.	1878.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Over sea .....	4,140,214	4,432,845	3,962,535	3,967,232
Coastwise .....	2,778,096	2,705,794	2,644,687	2,568,329
Total .....	6,918,310	7,138,639	6,627,222	6,535,561

The year 1878 shows a decrease of 71,671 tons, when compared with the shipments of 1877.

10.—Wages paid in the Northumberland and Durham coal mines.

Description.	Durham.		Northumberland.	
	September.		September.	
	1878.	1879.	1878.	1879.
<b>UNDERGROUND WORKMEN.</b>				
Hewers' present wages per day .....	s. d.	s. d.	s. d.	s. d.
Hand-putters' wages per day .....	3 8.22	4 1.13	4 2.84	4 9.6
Pony-putters' wages per day .....	2 4.5	3 9	3 4.20	3 8.66
Deputies' wages per day .....	2 5.7	2 9	2 10.02	3 1.80
Shifters' wages per day .....	3 10.89	4 4.10	3 8.9	4 3
Rollerway men, wages per day .....	2 10.18	3 1.92	2 8.4	3 0
Furnace men, wages per day .....	3 0.21	3 4.23	2 7.5	2 11
Onsetters (piece-men), wages per day .....	2 1.84	2 4.15	*10 11.4	*18 10
	4 0.15	4 5.49	4 0.42	4 5.8
<b>ABOVEGROUND MEN.</b>				
Banksmen (piece-men), wages per day .....	4 0.6	4 6	3 11.09	4 4.32
Screeners' wages per day .....	2 4.98	2 8.20	2 4.58	2 7.75
Laborers' wages per day .....	2 4.27	2 7.41	2 2.78	2 5.55
Cartmen, wages per day .....	2 4.98	2 8.20	2 1.88	2 4.75
Plate-layers' wages per day .....	2 8.61	3 0.23	2 6.15	2 9.50
Days the pits work per fortnight .....	10½		9½	

\* Per week.

*Net average selling price at pits of all coals raised.*

Mines.	1878.	1879.
	<i>s. d.</i>	<i>s. d.</i>
Northumberland.....	5 2	4 7.96
Durham.....	5 0	4 5.16

### SHIPBUILDING AND SHIPPING.

Perhaps no branch of English industry has been attended by greater prosperity during the period of depression than shipbuilding. The exceedingly low prices of all building material—prices quite unprecedented in the history of the trade—together with the greatly reduced wages of labor, induced many enterprising merchants and private capitalists to invest their money in iron steamers. They had faith in a return of prosperity and high freights, and looked forward to handsome dividends from their steamship property. And ship-yards have been kept tolerably busy throughout the United Kingdom—but more especially on the Tyne—while other manufactures have languished.

The total tonnage of ships built in the United Kingdom during 1878 is 637,302 tons, being an increase of 57,755 tons over the previous year. On the Tyne steamers representing 121,023 tons were built during 1878—an increase over 1877 of 33,055 tons. During the first three months of 1879, the tonnage built in the United Kingdom was 133,170 tons, showing a *falling off* of 11,679 tons when compared with the corresponding quarter of 1878. On the Tyne, however, the trade has gone on prospering—showing an *increase*, during the first quarter of this year over the corresponding period of 1878, of 9,352 tons. (The partial failure of the grain crops throughout Europe will probably give an impetus to the carrying trade, and to shipping interests generally.) In the number and tonnage of ships clearing outward from the ports of the Tyne during the year 1878, we find a decrease of 836 vessels, representing 117,697 tons, when compared with the *preceding* year. Tables intended to throw light upon the shipbuilding and shipping interests are here inserted (numbered 11 to 16, inclusive):

#### 11.—Number and tonnage of ships built in the United Kingdom during the years 1877 and 1878.

Description.	Number of ships.		Gross tonnage.	
	1878.	1877.	1878.	1877.
Sailing ships.....	596	724	145,787	216,261
Steamships.....	505	405	491,515	368,286
Total.....	1,101	1,129	637,302	579,547

12.—*Number and tonnage of ships built on the Tyne during the years 1878 and 1877.*

Description.	Number of ships.		Gross tonnage.	
	1878.	1877.	1878.	1877.
Sailing ships.....	4	1	192	83
Steamships.....	107	92	120,841	87,885
Total.....	111	93	121,023	87,968

13.—*Number and tonnage of ships built in the United Kingdom during the first three months in each of the years 1878 and 1879.*

Description.	Number of ships.		Gross tonnage.	
	1878.	1879.	1878.	1879.
Steamships.....	110	103	100,825	117,702
Sailing ships.....	178	100	44,024	15,468
Total.....	288	203	144,849	133,170

14.—*Number and tonnage of ships built on the Tyne during the first three months of the years 1878 and 1879.*

Description.	Number of ships.		Gross tonnage.	
	1878.	1879.	1878.	1879.
Steamships.....	27	21	24,948	25,596
Sailing ships.....				
Total.....	27	21	24,948	25,596

15.—*Number and tonnage of ships cleared from the Tyne during the years 1877 and 1878.*

Number of ships, 1877.....	15,327
Number of ships, 1878.....	14,491
Tonnage, 1877.....	4,907,797
Tonnage, 1878.....	4,790,100
Decrease in ships.....	836
Decrease in tonnage.....	117,697

16.—*Classification of vessels cleared outwards from the river Tyne during 1874, 1875, 1876, 1877, and 1878.*

Classification of register tonnage.	1874.	1875.	1876.	1877.	1878.
Above 1,000 tons register.....	198	229	273	263	265
900 tons and under 1,000.....	112	129	156	144	138
800 tons and under 900.....	185	217	243	232	249
700 tons and under 800.....	325	388	396	392	382
600 tons and under 700.....	603	812	928	813	757
500 tons and under 600.....	1,589	1,742	1,708	1,561	1,711
400 tons and under 500.....	1,477	1,704	1,843	1,887	1,763
300 tons and under 400.....	1,205	1,386	1,358	1,056	1,041
200 tons and under 300.....	2,383	2,450	2,246	2,120	1,882
100 tons and under 200.....	5,437	5,119	4,877	4,383	4,222
Under 100 tons.....	3,278	2,943	2,653	2,476	2,101
Total number of vessels.....	16,737	17,069	16,581	15,327	14,491

## IMPORT AND EXPORT TRADE.

The statement of goods imported into the Tyne during 1878 shows a decided increase in cattle, grain, and provisions; and, although without reliable data whereon to base a report for the current year, I have no doubt but the influx of what may be termed the necessities of life is still increasing. The steamers which run direct between New York and the Tyne have done much towards developing the American trade of this district. The statement of exportations shows a column of figures representing all but uninterrupted falling off in the trade of 1878 as compared with the preceding year. But, as I have already indicated, the tide has turned.

Form D (consolidated) shows an increase of exports from this consulate and its agencies for the last three quarters of the fiscal year just closed, and, notwithstanding a decrease of over \$7,500 during the first three months, the year shows the substantial increase of \$225,016.58. Tables showing the imports and exports of the Tyne, a price-list of articles exported from this district to the States, and a return of rainfall in this town during the past twelve months, are here inserted.

22 C R—VOL II

17.—Statement of goods (exclusive of coal and coke) imported, coastwise and over sea, into the Tyne during the year ending December 31, 1878.

Articles.	Coastwise.	Germany.	The Netherlands.	Norway, Sweden, and Denmark.	France and Algeria.	Russia.	Italy.	Spain and Portugal.	Austria, Turkey, Greece, and Egypt.	United States and West Indies.	British America.	South America.	Central America.	East Indies.	Total, 1878.	Total, 1877.	Increase.	Decrease.
Apples and pears . . . bush.	4,450	23,519	130,625	10	20,540										179,244	115,807	63,437	
Alfalfa . . . tons	6,822	8		44											6,874	7,297		423
Butter . . . cwt	2,154	3,086	6,442	165,859											177,541	138,465	44,076	
Bones . . . tons	508			35	123	168		153							36,666	67,141		1,020
Beef, pork, and bacon, cwt	20,621	4,100	1,450	10,493	2										63,861	54,110	9,751	30,475
Berley . . . quarters	15,782	4,402		2,43,675											4,838	8,035		4,197
Bran . . . do.	3,828	1,001	9												5,944	8,373		2,429
Bark . . . tons	4,223	1,08	1,629	24											39,211	35,065	4,146	
Barytes . . . do.	441	65	399												38,194	32,030	6,164	
Burnt sulphur ore . . . do.	30,927	5,635	913	630	818			288							5,828	4,840	1,088	
Cows and oxen, number	796			37,388				5,373							20,000	18,443	1,557	
Copper and copper ore, tons	289		6		260										510	107	403	20
Cheese . . . cwt	1,628	8	16,427	1,617	320	510												
Chrome ore, tons																		
Clover seed, cwt																		
Deals, battens, and boards, loads.	728	2,806	25	25,865		5,683		86		1,012	2,273				38,436	60,109		21,673
Eggs . . . cases	170	6,690	1,562	17,414				280							25,866	21,161	4,705	
Esparto grass, tons.					24,430			5,209							29,938	42,901		12,973
Flax and codilla . . . tons			126												315,329	283,415	31,914	
Flour and manure, sacks	178,584	44,780	120	90,706				1,049		336		10,402			18,051	7,680	10,369	
Glass . . . tons	3,313	377	8,126	1		63									8,623	9,294		424
Heap . . . cases	677	657													1,399	1,823		
Hay and straw . . . do.	25	558	15		10										1,783	3,672		1,889
Horses and ponies, number.	216	423	1,135	572											1,211	1,060	161	
Iron . . . tons	61,428	1,651	4,352	12,532	16	50		442							80,499	82,513		2,014
Lead . . . tons	100,285			1	8,238	30	16,845	124,898							245,380	212,805	32,575	
Lead and litharge . . . do.	3,051	419	548	16	1,661	296		29,532	3,920		13				39,403	33,318	6,085	
Laths and lath-wood, loads	21	143	21	63	25	1,171									1,457	2,067		630
Lead ore, tons	641							65							706	720		14
Linseed, do.			292	50											842	483		141
Mineral waters, quarters	3,666	22			500										5,063	7,174		2,111
Maize . . . gallons		1,486	4,112												6,426	6,378		
Maize . . . quarters	6,099	493		138						70,667	2,594				79,991	59,199	20,792	

Manganese and Manganese ore	1,068	224	808	350	850	1,672	1,496	176
Marble	13	204	209	209	209	499	465	60
Mahogany	578	19,642	109,306	364	8	4,508	4,464	44
Nitrate soda	3,514	13	244	59,191	5	10,272	104,044	34,026
Onions	6,769	2,689	16,182	364	8	10,272	104,044	124
Oil	87,322	2,689	16,182	364	5	10,272	104,044	20,074
Oats	2,801	3	3	3	8,038	17,507	19,856	2,349
Oranges and lemons	2,142	32	32	32	8,038	26,032	19,856	6,176
Potatoes	2,142	32	32	32	8,038	26,032	19,856	6,176
Phosphates	3,955	20,619	67	1,416	443	18,952	18,364	588
Peanut	6,698	7,291	5	13	443	14,046	23,361	9,355
Pyrites	22	75	200	75	443	14,046	23,361	52
Pitch	118	118	1,763	1,763	443	1,763	1,763	542
Plaster of paris	118	118	1,763	1,763	443	1,763	1,763	542
Rags and shoddy	124	312	10	290	443	1,763	1,763	245
Rye	174	101	22	82	443	1,763	1,763	245
Sheep and swine	5,962	42,483	42,483	42,483	443	1,763	1,763	245
Salt	96,570	11,748	125	24	443	1,763	1,763	245
Sugar	5,923	214	24	2,566	443	1,763	1,763	245
Spirits	1,274	25	24	2,566	443	1,763	1,763	245
Staves and headings	57	67	11,865	11,865	443	1,763	1,763	245
Scalaks	58,016	17,856	6,138	6,138	443	1,763	1,763	245
Shumac	469	6,138	6,138	6,138	443	1,763	1,763	245
Silver sand	173	134	134	134	443	1,763	1,763	245
Sulphur ore	3,658	55	55	55	443	1,763	1,763	245
Slates	4,955	13	13	13	443	1,763	1,763	245
Tallow, fat and grease	1,295	24	24	24	443	1,763	1,763	245
Tar	76	362	362	362	443	1,763	1,763	245
Timber	6,897	40,895	40,895	40,895	443	1,763	1,763	245
Yew	85	11	11	11	443	1,763	1,763	245
Walrus	436	33	33	33	443	1,763	1,763	245
Wine	111,971	65,935	65,935	65,935	443	1,763	1,763	245
Wheat	30	17,569	17,569	17,569	443	1,763	1,763	245
Wanscot logs	534	4,423	4,423	4,423	443	1,763	1,763	245
Wood hoops	3	10,705	10,705	10,705	443	1,763	1,763	245
Yeast	55	72	72	72	443	1,763	1,763	245
Zinc and zinc ore	55	72	72	72	443	1,763	1,763	245

18.—Statement of goods (exclusive of coal and coke) exported, coastwise and over sea, from the Tyne during the year ending December 31, 1878.

Articles.	Germany.	France and Algeria.	The Netherlands.	Russia.	Italy.	Spain and Portugal.	Norway and Sweden.	Denmark.	Austria, Turkey, Greece and Egypt.	United States and West Indies.	British America.	South America.	East Indies.	Australia.	Total foreign.	Total coastwise.	Total foreign and coastwise, 1878.	Total foreign and coastwise, 1877.	Increase.	Decrease.
Soda crystals .....	14,359	4,226	12,502	1,605	1,773	241	4,683	7,575	161	12,415	3,569			32	63,140	48,887	110,027	111,431		1,404
Alkali and soda ash .....	16,762	2,908	10,362	5,778	1,986	709	2,184	4,185	119	10,436	26				58,208	17,743	74,143	82,122		8,087
Blackening powder .....	5,369	1,031	5,341	2,977	1,333	148	679	571	9	280	7				18,086	5,655	23,150	26,284		3,134
Carbonate of soda .....	618	193	247	131	148	36	15	81	24	848	290				9,871	2,587	6,253	6,702		417
White soda .....	324	2	492	256	40	15	5	5		30					1,779	1,587	1,587	1,587		96
Sulphate of soda .....	231	1	50	1,210	4	271	26	1							1,792	498	2,190	2,170		20
Hyposulphite of soda .....						6				25					166	12	166	129		26
Wash and nitrate of soda .....	4					1	34	1							163	70	173	148		25
Magnesia .....	38	1	22	51	27	9	1	10	1	42	4				182	91	273	290		13
Pearl and granber salts .....															17	9	26	37		31
Alum .....	25		52	102	34	1	22	44		158					291	484	875	1,236		361
Opopneus .....	37		63	21	219		44	24		145					487	3,284	3,781	4,639		858
Masture .....	62	3		9	1,765	6	258	69			40				511	50	561	1,097		536
Dyes .....	122	49	9	1,693	466	2	15	3		60					5,210	13,218	18,528	20,411		1,893
Ammonia .....	1,039		59	4		2	2	24							1,068	241	1,309	3,377		1,448
Soap .....	163		1	1	2		1	8							183		183	307		114
Red lead .....	396	146	266	502	420	200	164	172	58	45	30	4			10	306	316	837		21
White lead .....	20		13	133	44	19	78	116	6	7	860	11		32	2,435	4,414	6,849	7,145		296
Lead .....	46	77	43	51	12	25	22	16	3	5					807	8,484	9,291	9,434		143
Lead shot .....	43	1	3	3	3		71	79	3	3	2				300	244	564	643		79
Sheet and pipe lead .....	917		2	1,276	89	26	260	75	8	136					2,728	6,519	9,247	9,433		202
Pig-lead .....	88	2	16	2,519	9	21	292	72	81	61					3,221	5,988	9,219	18,306		9,087
Spanish brown and yellow ochre .....	127	31	87	115	9	21	62	5		970	99				1,516	382	1,898	2,499		601
Jaup-black and coal dust .....	24				10	1	22	22	5						85	16	101	148		47
Pig-iron .....	8			26			33	8			4	52			137	366	503	743		240
Iron castings .....	2,618	11	5,691	6,747	669	5,707	772	1,373	253	6,671	654				31,451	2,401	33,912	34,205		293
Bar iron and rails .....	154	51	852	310	171	274	980	306	416						8,073	15,555	28,628	13,667		9,961
Boards, sheets, and angles .....	394	15	83	1,743	12	25	1,477	670	56		1,008	34	114		5,641	8,422	8,422	8,975		553
Boles, nuts, nails, and iron work .....	294	2	1,394	858	109	55	965	119	245		1,187	59			5,947	8,435	14,362	18,249		3,807
Chains .....	73			42	1	25	24	94	70						5,502	1,739	2,241	2,339		98
Anchor and bridge work .....	177	27	699	177	207	4	602	68							1,339	601	1,940	4,774		2,834
Machinery and wire rope .....	17	7		3	3	163	550	94	408			24	736		3,054	8,341	6,395	8,341		2,096
Steel and steel rails .....	5	8	2	2	3	3	3	70	19						825	57	882	698		284
Wire and wire rope .....	3				11	1	18	1	2						37	37	503	502		38
Scrap-iron .....	516						57	768							1,841	1,938	3,279	1,845		1,434

Purple iron ore, iron stone and mill cinders	2,558	2,339	2,063	248	142																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
--	-------	-------	-------	-----	-----	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



19.—Statement showing the value of declared exports from the consular district of Newcastle-upon-Tyne and its agencies, viz., Sunderland, Hartlepool, and Carlisle, to the United States during the four quarters of the year ending September 30, 1879.

QUARTER ENDING DECEMBER 31, 1878.

Articles.	Newcastle-upon-Tyne.	Sunderland.	Hartlepool.	Carlisle.	Total for consulate and agencies.
Arms .....					
Chemicals .....	\$57,663 23				\$57,663 23
Coals .....	2,221 73	\$594 68	\$5,171 87		7,988 28
Cotton .....				\$17,696 33	17,696 33
Furs and skins .....	30,244 86				30,244 86
Glass .....		1,139 45			1,139 45
Grindstones .....	1,060 24				1,060 24
Gypsum .....					
Iron .....				535 31	535 31
Lead .....	111 92				111 92
Linen towels .....				388 06	388 06
Paints .....	11,426 30				11,426 30
Pear stocks .....					
Soda .....	95,745 86				95,745 86
Miscellaneous .....	12,330 19				12,330 19
Total .....	210,804 33	1,734 13	5,171 87	18,589 70	236,300 03
Total for preceding year .....	221,446 22	4,603 19		17,789 09	243,838 50
Increase .....			5,171 87	800 61	
Decrease .....	10,641 89	2,869 16			7,538 47

QUARTER ENDING MARCH 31, 1879.

Articles.	Newcastle-upon-Tyne.	Sunderland.	Hartlepool.	Carlisle.	Total for consulate and agencies.
Arms .....	\$175 19				\$175 19
Chemicals .....	34,806 78				34,806 78
Coals .....	5,899 67		\$2,497 97		8,397 64
Cotton .....				\$23,479 46	23,479 46
Furs and skins .....	37,940 87				37,940 87
Glass .....	316 31				316 31
Grindstones .....	1,529 33				1,529 33
Gypsum .....	2,407 61				2,407 61
Iron .....					
Lead .....					
Linen towels .....				269 32	269 32
Paints .....	8,739 53				8,739 53
Pear stocks .....					
Soda .....	107,768 40				107,768 40
Miscellaneous .....	13,791 09	\$3,712 75	153 92	97 82	17,756 58
Total .....	213,374 78	3,712 75	2,651 89	28,846 60	243,586 02
Total for preceding year .....	174,335 43	363 68	1,348 99	12,694 64	188,742 74
Increase .....	39,039 35	3,349 07	1,302 90	11,151 96	54,843 28
Decrease .....					

## QUARTER ENDING JUNE 30, 1879.

Articles.	Newcastle-upon-Tyne.	Sunderland.	Hartlepool.	Carlisle.	Total for consulate and agencies.
Arms .....	\$13,517 80				\$13,517 80
Chemicals .....	5,868 82		\$5,086 87		10,955 69
Coals .....				\$18,659 09	18,659 09
Cotton .....	68,969 87				68,969 87
Furs and skins .....					
Glass .....		\$367 71			367 71
Grindstones .....	3,842 46				3,842 46
Gypsum .....	1,611 94				1,611 94
Iron .....				243 32	243 32
Lead .....	557 03				557 03
Linen towels .....				487 07	487 07
Paints .....	6,329 88				6,329 88
Pear stocks .....					
Soda .....	55,240 48				55,240 48
Miscellaneous .....	33,111 79		291 99		33,403 78
Total .....	189,050 07	367 71	5,378 86	19,389 48	214,186 12
Total for preceding year .....	139,765 65	121 13	1,751 94	18,393 16	160,031 88
Increase .....	49,284 42	246 58	3,626 92	996 32	54,154 24
Decrease .....					

## QUARTER ENDING SEPTEMBER 30, 1879.

Articles.	Newcastle-upon-Tyne.	Sunderland.	Hartlepool.	Carlisle.	Total for consulate and agencies.	Total for the year.
Arms .....						\$175 19
Chemicals .....	\$93,499 05				\$93,499 05	199,486 86
Coals .....	10,788 11		\$2,951 77		13,739 88	41,081 49
Cotton .....				\$27,058 42	27,058 42	86,863 30
Furs and skins .....	63,326 61				63,326 61	200,382 21
Glass .....		\$307 27			307 27	2,130 74
Grindstones .....	1,809 51				1,809 51	8,241 54
Gypsum .....	1,612 05				1,612 05	5,631 60
Iron .....			18,605 83	13,869 52	32,475 35	33,253 98
Lead .....	5,806 31				5,806 31	6,475 26
Linen towels .....						1,144 45
Paints .....	10,134 00				10,134 00	36,629 71
Pear stocks .....						
Soda .....	65,435 99				65,435 99	324,190 73
Miscellaneous .....	8,804 85		324 98		9,129 83	72,619 28
Total .....	261,116 48	307 27	21,882 58	40,927 94	324,234 27	1,018,306 44
Total for preceding year .....	181,396 31	1,342 95	2,135 33	15,802 15	200,676 74	793,289 86
Increase .....	79,720 17		19,747 25	25,125 79	123,557 74	225,016 58
Decrease .....		1,035 68				

## 20.—Price-list of articles exported from Newcastle-upon-Tyne to the United States.

Articles.	Prices—		Remarks.
	September 30, 1878.	September 30, 1879.	
Alkali, white .....	1½d. per cent. per cwt., less 5 per cent.	1½d. per cent. per cwt., less 2½ per cent.	Strength, 48 to 52 per cent. Strength, 36 to 40 per cent.
Alkali .....	1½d. per cent. per cwt., less 5 per cent.	1½d. per cent. per cwt., less 2½ per cent.	
Antimony:			
Star of Reg. ....	48s. per cent. per cwt., net ....	47s. per cent. per cwt., net ....	
Bowl .....	46s. per cent. per cwt., net ....	45s. per cent. per cwt., net ....	
Bleaching powder..	£5 per cent. per ton, less 2 per cent.	£4 11s. per ton, net .....	
Brick, fire .....	£2 to £2 10s. per 1,000, net....	£2 to £2 10s. per 1,000, net....	
Clay, China .....	£1 3s. to £1 5s. per ton, net....	£1 3s. to £1 5s. per ton, net....	
Coal:			
Gas .....	7s. 6d. to 8s. 6d. per ton, net....	6s. 6d. to 7s. 6d. per ton, net....	
Steam .....	9s. to 10s. per ton, net.....	8s. 6d. to 9s. 6d. per ton, net....	
Cannel .....	18s. per ton, net.....	18s. per ton, net.....	
Lead:			
Orange .....	27s. 6d. per cwt., net .....	26s. per cwt., net.....	
Red refined .....	17s. per cwt., net.....	15s. 3d. per cwt., net.....	
Glassmakers' .....	19s. per cwt., net.....	17s. per cwt., net.....	
Litharge .....	18s. per cwt., net.....	16s. 3d. per cwt., net.....	
Litharge, ground .....	17s. 6d. per cwt., net.....	15s. 9d. per cwt., net.....	
Paint, white lead .....	23s. 9d. per cwt., net.....	20s. 6d. per cwt., net.....	
Soda crystals .....	£3 per ton, less 2 per cent.....	55s. per ton, net.....	
Soda ash .....	1½d. per cent. per cwt.....	1½d. per cent. per cwt., less 2½ per cent.	Strength, 48 to 52 per cent.
Soda, bicarbonate..	£9 per ton, net.....	£8 10s. per ton, less 5 per cent.	

## NOTTINGHAM.

Statement showing the value of declared exports from the consular district of Nottingham to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Lace goods .....	\$436,850 40	\$808,901 60	\$558,968 19	\$1,032,216 56	\$2,836,936 75
Hosiery .....	102,423 42	267,613 64	84,955 36	282,484 25	737,476 67
Muslins .....	14,747 72	37,180 06	3,607 50	5,533 21	61,068 49
Linens .....	40,269 34	54,888 25	44,855 00	46,290 14	186,302 73
White goods .....	2,950 70	8,456 25	5,622 30		12,029 25
Crape .....	19,512 10	6,584 37	6,816 20	9,567 53	42,480 20
Elastic goods .....	37,623 52	46,134 41	30,863 55	57,734 81	172,356 29
Haberdashery .....	2,367 76		545 16		2,912 92
Velvets .....			3,348 72	1,386 95	4,735 67
Salted skins .....	50,652 23	36,435 48	41,234 00	65,045 63	193,367 34
Venetian red .....	6,578 90	1,250 69	1,913 37	2,569 51	12,312 47
Terra alba .....	1,893 70	1,012 23	1,553 47	1,056 03	5,515 43
Ale .....		\$24 70	961 23	1,489 14	3,375 07
Oxide of iron .....		2,331 00	597 60	1,961 19	4,889 79
Leather .....		2,744 70	6,900 43	8,819 09	18,464 22
Raw silk .....		807 83	1,793 24		2,601 07
Miscellaneous .....	1,243 20		2,593 98	7,325 33	11,162 51
Machinery .....	2,664 28	423 38		1,527 81	4,615 47
Dyed skins .....	1,402 05	1,333 42		1,421 01	4,156 48
Stationery .....	4,474 50				4,474 50
Total .....	725,653 82	1,372,022 01	797,129 30	1,526,428 19	4,421,233 32
Total of preceding year..	604,004 95	1,185,393 52	420,218 23	852,600 01	3,062,216 71
Increase .....	121,648 87	186,628 49	376,911 17	673,828 18	1,359,016 61

JASPER SMITH.

## PLYMOUTH.

*Report, by Consul Fox, on the commerce and industries of the consular district of Plymouth for the year ending September 30, 1879.*

The commercial business of this port and district during the past twelve months has remained in its previous state of depression, and almost entire absence on part of consumers to purchase in excess of immediate consumptive wants.

One of the principal industries of this port, that of wooden ship building, continues very inactive, arising from the low rate of freights and an increase of build of iron steam and sailing ships. The copper mines in this locality, from low price of that mineral, have, in very few instances, paid their working expenses. The only article of export here—china clay—has shown a considerable falling off, being \$10,611.34 value during the past against \$21,473.92 the previous year.

Last winter was very protracted. Spring opened favorably for all vegetation; but from May to the middle of last month (September) the temperature was ungenial, and rain fell almost weekly, with only slight intervals of sunshine; hence of fruit the crop is very small and quantity inferior.

The wheat harvest is not completed; the quality indifferent, and yield fully one-third under an average.

Barley deficient in weight and yield. Oats good in quality and quantity. Hay, a heavy crop, but from wet weather but little has been secured in prime condition.

Root crops, from similar causes, promise to be of poor quality. Potato disease appeared early in July, and the crop is reported not to be half a crop of quality suitable for human food.

HENRY FOX.

UNITED STATES CONSULATE,  
*Plymouth, October 1, 1879.*

*Statement showing the commerce at Plymouth for the year ending September 30, 1879.*

## IMPORTS.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
Guano.....tons..	1,618 <sup>1</sup> / <sub>2</sub>	\$90,595 73. 4	Nil .....	Peru.
Bones.....do....	796 <sup>1</sup> / <sub>2</sub>	21,318 92	..do .....	Argentine Republic
Horns.....do....	7 <sup>1</sup> / <sub>2</sub>	204 75	..do .....	Do.
Maize.....quarters..	3,293 <sup>1</sup> / <sub>2</sub>	18,434 30	..do .....	United States.
Canned beef.....cases..	220	2,141 26	..do .....	Do.
Wheat.....quarters..	2,040 <sup>1</sup> / <sub>2</sub>	18,210 48	..do .....	Do.
Oil-cake.....tons, cwts, qrs, lbs..	268 6 3 24	10,447 34	..do .....	Do.
Tallow.....tons..	10	1,703 27	..do .....	Do.
Petroleum.....gallons..	41,316	5,445 60	..do .....	Do.
Benzoline.....do....	39,062	5,148 75	..do .....	Do.

*Statement showing the navigation at the port of Plymouth for the year ending September 30, 1879.*

Flag.	From—	ENTERED.			
		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.
American*.....	Pabellon de Pica.....	1	1, 191	1	1, 191
	Rosario.....	1	628	1	628
	Philadelphia.....	1	516	1	516
	New York.....	1	557	} 2	969
	Do.....	1	412		
Flag.	To—	CLEARED.			
		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.
American*.....	Sandy Hook.....	1	1, 633	1	1, 633
	Cardiff.....	1	516	1	516
	Newport, Monmouth.....	1	628	1	628
	New York.....	1	557	} 2	969
	Do.....	1	412		

\* Other flag not known.

*Statement showing the value of declared exports from the consular district of Plymouth to the United States during the quarter ending June 30, 1879.*

Articles.	Value.
Haolin or china clay.....	\$8, 114 41
A setter dog for breeding purposes.....	291 99
Total.....	8, 406 40

## SHEFFIELD.

*Report, by Consul Webster, on the depression of trade in Sheffield, and on the competition of American manufactures with those of that district.*

### INCREASED EXPORTS TO THE UNITED STATES.

I have the honor to forward herewith, in duplicate, my report on the trade of this consular district for the year ending September 30, 1879.

It will be seen by comparison with the report of last year that there has been a small increase in the total amount of trade during the year just closed. This increase will be largely accounted for by an exceptional shipment of Bessemer steel rails, none having been previously sent to the United States from this district since the early part of the year 1875.

## DISTRESS AMONG THE WORKING CLASSES.

So serious has been the depression in business, and the consequent want of employment in the various trades, that great distress prevailed during the past winter. To meet this destitution a fund of £12,000, called the mayor's fund, was raised by private subscription. Similar destitution during the coming winter is apprehended.

## EMIGRATION SOCIETIES.

Another result of the great depression is a larger emigration and increasing inquiry as to the inducements offered by the United States to intending emigrants. The demand for information on the advantages of different parts of our country is constant. The book "The First Biennial Report of the State Board of Agriculture, Kansas, 1877-'78," just received at this office, seems well adapted to give such information.

A workman's emigration society has been formed in Sheffield, which holds weekly meetings for discussion, lectures, &c. Documents of all kinds, giving reliable information of recent date, are in demand.

## AMERICAN COMPETITION.

Of the many Sheffield industries the file trade has been one of the largest. "The Ironmonger," a London publication of wide circulation, remarks as follows upon the present state of the trade:

It is in a most disorganized condition. The competition brought to bear upon the file trade of the town (Sheffield) has been most severe, owing chiefly to the efforts of American houses. There are firms here who used to send thousands of pounds worth of files to America every year, who now do not send as many pounds worth. They (the Americans) are meeting us in Canada, Australia, the Cape, and other markets, and seem determined to win their way wherever they go.

The present condition of this trade with the United States, and the rate of the decline, will be seen from the following statement: In the year ending September 30, 1873, the value of files sent from Sheffield to the United States was \$650,741.94; in 1875, \$197,906.68; in 1878, \$71,049.26; in 1879, \$54,871.16. Machinery is used to some extent in the production of files in this district, and with good success, as would appear from the following: A customer of a large manufacturer, giving an order for files, says at the close of his letter, "I hear you are about going into the cutting of files by machinery. Do not send me any of them." The fact was the firm had been using machinery for a considerable time, and had supplied this very customer with machine-cut files. No difference had been noticed.

In cutlery the comparison between 1878 and 1879 shows an improvement. The same may be said, to a smaller degree, of the tool trade. Not long since a prominent tool-maker of this district received a letter from his agent in a distant colony. The writer says:

The Americans are taking the trade here, and for the reason that the best Sheffield tools will not stand the hard woods of this country. English tools will work only the softer woods. I am within the truth when I say that fifty pounds worth of American tools are sold in this country to five pounds worth of English.

This is in accord also with another fact of which I am credibly informed. A mercantile firm in a large town in England, which formerly exported only English hardware to Australia, has for a year or two been compelled to buy United States goods to the value of \$15,000 to \$20,000

monthly, for their Australian customers. These goods were formerly supplied by Birmingham, Wolverhampton, and Sheffield.

### IMPORTS OF AMERICAN FOOD PRODUCTS.

The imports of American food products into this district are enormous and constantly increasing. In this time of great depression, this supply of food, so cheap, so good, and so abundant, is to the great laboring masses of this country an inestimable blessing.

C. B. WEBSTER.

UNITED STATES CONSULATE,  
Sheffield, October 1, 1879.

*Declared value of exports from Sheffield to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Steel .....	\$220,859 12	\$173,848 10	\$221,167 56	\$255,738 18	\$871,612 96
Iron .....	1,246 21		1,270 97		2,517 18
Spiegel Eisen .....	34,043 52	38,894 79	72,613 90	78,894 93	224,447 14
Bessemer steel rails .....			162,685 84	149,797 23	312,483 07
Bessemer steel tyres .....	1,513 82		174 63		1,688 45
Armor plates .....			377 77	36,004 88	36,382 65
Patent buffers .....				42 90	42 90
Machinery .....			228 93		228 93
Copper .....			24 93		24 93
Cutlery .....	203,649 40	206,519 09	147,304 56	250,646 38	808,119 43
Files .....	12,139 04	14,769 36	10,906 69	17,056 07	54,871 16
Saws .....	56 17	70 68	15 80		142 65
Edge and other tools .....	6,683 55	8,387 86	7,037 50	13,824 21	36,833 12
Garden tools .....	3,312 94	3,424 40	918 55	264 74	7,920 63
Scythes .....		813 39	347 61		1,161 00
Sickles, reaping and grass hooks .....	214 88	2,860 51	1,852 31	140 89	5,068 59
Sheepshears .....	19,752 74	13,039 94	4,800 61	4,784 83	42,378 12
Electro-plated and German silver goods .....	145 26	579 12		165 51	889 89
Anvils .....	1,521 63		723 40	403 54	2,648 57
Picks .....	428 34				428 34
Iron teeth .....			98 54		98 54
Trays and waiters (iron) .....	49 34		289 45	23 04	361 83
Spoons (iron) .....			92 52		92 52
Umbrella ribs .....	2,602 81	1,724 86	1,741 57	854 21	6,923 55
Bicycles .....	527 96				527 96
Fenders and fire-irons .....	71 30			237 93	309 23
Roasting jacks .....	36 32				36 32
Goffering irons .....	3 58				3 58
Dog chains .....	4 06				4 06
Dog collars .....		105 11			105 11
Needles .....	103 51	50 89	50 93		205 33
Graining combs .....		213 63		239 07	453 30
Small bells .....		6 21			6 21
Screws .....			15 80		15 80
Shoe tips (steel) .....				3 46	3 46
"Doctors" or calico web .....			9 48		9 48
Hackle and gill pins .....	168 14	181 82	376 94		726 90
Other hardware .....			105 52		105 52
Guns and gun fittings, shooting tackle, &c .....	2,566 49	6,561 64	7,604 34	13,859 40	30,591 87
Measures, measuring tapes, land-chains, rules, &c .....	2,165 08	1,927 75	2,406 82	3,167 44	9,667 09
Surgical instruments and appliances .....	813 78	137 43	158 64	298 31	1,408 16
Optical and nautical instruments .....	584 43	529 99	281 28	150 52	1,546 22
Magnetic compasses .....				170 89	170 89
Magnets .....	571 49	574 93	354 52	1,048 40	2,549 34
Granite tomb .....				475 42	475 42
Grindstones .....	1,573 27	205 91	2,915 61	3,181 07	7,875 86
Milstones .....				169 59	169 59
Scythe stones .....		58 55			58 55
Fire-bricks .....	617 80	312 09		306 01	1,235 90

*Declared value of exports from Sheffield to the United States, &c.—Continued.*

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Salted skins.....	\$57,960 99	\$32,272 27	\$30,865 10	\$79,157 74	\$200,250 10
Leather (chamois).....			285 61	860 73	646 34
Parchment.....	495 67	639 33	1,206 28	1,484 73	3,826 01
Glue.....	8,854 20	1,434 18	9,378 18	8,546 17	27,712 73
Grease.....	707 19	730 38	1,552 62	2,219 02	5,209 21
Sod oil.....		506 85	1,080 54		1,587 39
Berlin black.....	43 40				43 40
Black wax.....			30 65	14 59	45 24
Hair-cloth.....			1,281 59	188 33	1,469 92
Drawn cocco fibre.....	68 86		227 98		296 84
Upholsterers' sundries.....	458 30				458 30
Haberdashery.....				21 32	21 32
Fancy leather and cabinet goods.....				241 81	241 81
Wooden and glass ware.....	259 14	205 24	392 74	134 87	981 99
Saw handles.....			57 54		57 54
Pill and willow boxes.....	253 06		511 19		764 25
Glaziers' and engravers' diamonds.....				27 98	27 98
Horns and horn tips.....				1,092 00	1,092 00
Combs.....			5 83		5 83
Gut bands.....			99 27		99 27
"Pearls" (non-conductors for handles of tea and coffee pots).....				334 80	334 80
Books, engravings, stationery, &c.....	153 83	345 84	856 65	456 66	1,812 98
Clock and vases.....				47 13	47 13
One pair bellows.....				25 06	25 06
Trees and shrubs.....			144 36		144 36
Cheese.....	48 66				48 66
Ale.....		400 87			400 87
Wine and spirits.....		157 00	280 79	207 68	646 07
Umbrellas.....		19 46			19 46
Total in United States gold.....	586,829 40	512,510 07	694,093 44	926,510 27	2,723,943 18
Total for preceding year.....	639,462 95	584,914 11	418,644 58	487,421 85	2,140,443 49
Increase.....			279,448 86	439,088 42	583,499 69
Decrease.....	52,633 55	82,404 04			

## SOUTHAMPTON.

*Statement showing the value of declared exports from the consular district of Southampton to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Live stock.....	\$20,419 83	\$21,412 60			\$41,832 43
Manufactured goods.....	3,555 47	6,763 29	\$2,884 00	\$2,209 23	15,411 99
Hides.....	1,119 29				1,119 29
Boats.....	729 97	589 97			1,319 94
Live plants.....	264 17	112 46			376 63
Cement paint.....	102 19				102 19
Silver.....		243 32			243 32
Private effects.....			973 30		973 30
Carriage, and other articles.....			378 85		378 85
Wearing apparel.....			314 36		314 36
Personal effects.....				2,077 99	2,077 99
Cigarettes.....				38 93	38 93
Total in United States gold.....	26,190 92	29,121 64	4,550 51	4,326 15	64,189 22
Total for preceding year.....				44,536 28	44,536 28
Increase.....	26,190 92	29,121 64	4,550 51		19,652 94
Decrease.....				40,210 13	

WM. THOMSON.

N. B.—The returns for the three first quarters of the preceding year were embodied in those of the consular-general, Southampton being during that period an agency of the consulate-general, London.



## TUNSTALL.

*Statement showing the value of declared exports from the consular district of Tunstall to the United States during the quarters of the year ending September 30, 1879.*

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Earthenware.....	\$474,265 95	\$707,853 49	\$563,834 10	\$702,585 28	\$2,448,538 82
Farian .....	603 24		2,569 21	934 11	4,106 56
Files .....	5,773 17	6,652 76	9,581 07	7,943 20	28,950 20
China .....	3,667 11	3,441 75	6,852 11	11,495 05	25,456 02
Saddlery .....	1,197 42	2,343 36	1,769 32	4,722 48	10,032 58
Majolica .....	4,689 91	2,843 19	5,277 46	4,656 30	16,966 86
Chamois leather.....	11,834 66	3,270 00	1,020 87	3,126 24	19,257 77
Cuttlery .....	1,796 00	4,620 84			6,416 84
Salted skins .....	7,458 64	16,993 07	32,193 78	51,671 91	108,317 40
Porcelain .....		1,474 79			1,474 79
Colors .....			2,796 94	743 12	3,540 06
Tailors' trimmings.....		685 36	674 01	188 03	1,547 40
Miscellaneous .....	542 68	1,055 18	10,424 69	788 88	12,811 43
Total in United States gold .....	511,828 78	749,739 79	636,993 56	788,914 60	2,687,476 73
Total for preceding year .....	653,591 27	715,405 99	587,650 49	648,034 02	2,604,681 77
Increase .....		34,333 80	49,343 07	140,880 58	82,794 96
Decrease .....	141,762 49				

EDWARD E. LANE.

## I R E L A N D .

## BELFAST.

*Report, by Consul Donnan, on the trade and commerce of Belfast for the year ending September 30, 1879.*

I have the honor to transmit my annual report of the commerce of this consular district for the year ending September 30, 1879.

## EXPORTS TO THE UNITED STATES.

For the quarter ending December 31, 1878, the exports of all kinds, principally linen goods, flax, cotton goods, hemp, ginger ale, felt, and iron ore, were declared to be of the value in United States gold coin of \$1,391,726.66; for the quarter ending March 31, 1879, they were declared to be of the value of \$2,322,455.82; for the quarter ending June 30, 1879, they were declared to be of the value of \$1,451,895.63; and for the quarter ending September 30, 1879, they were declared to be of the value of \$2,162,078.08.

Total declared value for the year ending September 30, 1879, \$7,328,156.19. Total declared value for the year ending September 30, 1878, was \$6,243,226.62. This shows an increase of \$1,084,929.57 over the year ending September 30, 1878.

The number of arrivals of American vessels for the year ending September 30, 1879, have been 9, the total tonnage of which amounted to 6,123 tons. This is a decrease as compared with the year ending September 30, 1878, of 5 in the number of arrivals and of 575 in tonnage.

These vessels brought from New York, Baltimore, Philadelphia, and via Quebec, in Canada, wheat, Indian corn, petroleum, flour, slates, and oil-cake of the total value of \$257,823.53. The total tonnage which has arrived at this port from foreign countries for the year ending September 30, 1879, is 239,223 tons. Of all this, as I have stated above, only 6,123 tons was under the flag of the United States.

#### IMPORTS FROM THE UNITED STATES.

Vessels sailing under the British flag have brought to this port from ports in the United States 1,444,280 cwt. of Indian corn; 695,248 cwt. of wheat; 3,473 tons of phosphate rock; 20,907 bags and barrels of flour; 9,372 barrels of petroleum; 370 tons slates; 1,448 barrels of rosin; 475 casks of turpentine; 1,061 pieces of timber and deals.

In addition to the above, the vessels of the Unicorn Vanderbilt Line of steamers brought to this port large general cargoes, consisting of bags and barrels of flour, tinned meats, molasses, and some cattle and sheep.

These last-named vessels all sail under the British flag.

Vessels sailing under the Norwegian flag brought to this port 90,010 cwt. Indian corn; 108,783 cwt. of wheat; 2,472 bags and barrels of flour; 3,217 barrels of petroleum.

Vessels sailing under the Russian flag brought 23,330 cwt. of Indian corn; 50,859 cwt. of wheat.

Vessels sailing under the Italian flag brought 60,468 cwt. of Indian corn; 67,518 cwt. of wheat.

Vessels sailing under the flag of Austria brought 53,603 cwt. of wheat.

Vessels sailing under our own flag, 79,399 cwt. of Indian corn; 40,960 cwt. of wheat, and 4,506 barrels of petroleum.

Vessels sailing under the flag of Denmark brought 1,772 barrels of petroleum.

#### AN AMERICAN HOUSE WANTED.

It appears to me that if some of our enterprising exporters would open a house in Belfast for the sale of first-class American products that after a time it would become profitable. Of course, such an establishment should not expect to have a full run of customers at first, but by energy and perseverance I am of opinion that a good, profitable business could be built up.

#### POPULATION AND EMIGRATION.

Belfast still continues to improve; large numbers of new dwelling houses are being erected in various portions of the town.

The population is officially estimated, I believe, at 212,000, but including the smaller towns outside the borough boundary, and which are really parts of Belfast, the population would be, I believe, 235,000. By the census of 1871—the last one taken by the British Government—Belfast contained a population of 182,082.

Emigration to the United States from this consular district, though not large yet, has increased for the year just ended over preceding years for some time past.

J. W. M. DONNAN.

UNITED STATES CONSULATE,  
*Belfast, October 3, 1879.*

*Statement showing the value of declared exports from the consular district of Belfast to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Linen and cotton, Belfast and Ballinacorney	\$1,256,641 78	\$2,144,681 76	\$1,599,130 08	\$1,998,292 91	\$6,978,747 13
Flax, hemp, and yarns	169,266 22	156,597 26	145,144 77	89,736 88	560,805 13
Grain and oil	2,437 34	2,697 44	12,153 67	14,004 35	38,688 24
Felt	2,429 57	2,645 97	5,452 58	6,790 28	19,518 10
Whisky, wine, and porter	2,321 99	455 16	316 61	512 27	4,006 03
Iron ore	5,937 58	6,116 50	11,840 21	12,985 02	36,780 31
Tow		2,252 94	3,324 24	1,549 41	8,227 59
Earthenware				315 49	315 49
Machinery and hardware	515 99	186 14	1,444 37	1,616 27	3,162 77
Oilseed	109 39		409 27		518 66
Terra cotta		2,598 37	1,660 06	2,335 88	7,594 31
Granite	529 67	256 40		416 08	1,195 15
Books and stationery				11,139 80	11,139 80
Potatoes	245 76	366 39			1,312 00
Bacon		316 19			316 19
Summers	261 39	1,671 88	19 47	19,475 44	20,828 18
Total for the year	1,291,726 66	2,322,455 82	1,451,895 63	2,162,078 08	7,328,156 19
Total for preceding year	1,203,291 05	2,582,579 88	1,096,281 98	1,426,973 71	6,243,226 02
Increase	88,435 61		391,613 65	655,104 37	1,084,929 57
Decrease		60,124 06			

## CORK.

*Statement showing the value of declared exports from the consular district of Cork to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Hides	\$13,511 27	\$6,427 46	\$13,138 60	\$19,909 03	\$52,986 36
Kip and calfskins		1,459 95		8,558 46	10,018 41
Leather				346 10	346 10
Whisky	4,884 11	2,126 61	1,721 84	1,203 14	9,935 70
Down goods	147 85	185 03		231 67	564 55
Sausage casings		656 97	425 81	1,411 28	2,494 06
Feathers				154 41	154 41
Old iron rails				4,416 78	4,416 78
Linen goods				2,118 84	2,118 84
Total in United States gold	18,543 23	10,836 92	15,286 25	38,349 61	83,016 01
Total for preceding year	25,792 77	11,667 11	6,334 89	9,408 30	53,203 07
Increase			8,951 36	28,941 31	29,812 94
Decrease	7,249 54	880 19			

LEWIS RICHMOND.

## DUBLIN.

*Statement showing the value of declared exports from the consular district of Dublin to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Ale and porter .....	\$79,100 25	\$60,944 54	\$45,581 28	\$28,844 28	\$214,470 35
Aerated waters .....	4,053 30	8,966 28	11,237 00	9,025 62	33,282 29
Books .....	432 75	1,217 48	933 30	248 20	2,831 73
Glue .....	6,651 00	7,110 30	11,445 08	5,500 00	30,706 38
Hides .....				22,810 55	22,810 55
Hosiery .....	1,473 00	1,407 00		1,214 20	4,094 20
Oaten meal .....	9,409 00	6,227 26	5,045 36	1,078 20	21,759 82
Oil leather .....	450 00	1,898 74	2,391 42	1,947 68	6,787 84
Prune wine .....	1,769 00	2,238 16	2,415 50	3,649 16	10,071 82
Salted sheep-skins .....	54,433 28	63,074 22	95,385 80	87,509 00	300,402 30
Sausage casings .....	10,062 28	5,771 80	4,817 00	8,403 64	29,054 72
Whisky .....	5,302 00	639 84	154 58	9,212 00	15,508 42
Wines (foreign) .....	204 40	1,033 40	117 25	947 20	2,302 25
Miscellaneous .....	4,165 58	1,509 22	1,264 08	1,197 00	8,135 88
Total, United States gold .....	177,505 84	162,338 24	180,787 65	181,586 73	702,218 46
Preceding year .....	171,130 81	122,025 90	127,885 59	162,120 36	583,162 66
Increase .....	6,375 03	40,312 34	52,902 06	19,466 37	119,055 80

B. H. BARROWS.

## LONDONDERRY.

*Statement showing the value of declared exports from the consular district of Londonderry to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Whisky .....	\$173 05	\$203 77		\$548 62	\$925 44
Flax .....	314 04				314 04
Iron ore .....	243 80		\$585 44		829 24
Sundries .....		65 20			65 20
Total in United States gold .....	730 89	268 97	585 44	548 62	2,133 92
Total for preceding year .....	634 84	1,054 22	108 60		1,797 66
Increase .....	96 05		476 84	548 62	336 26
Decrease .....		785 25			

A. LIVERMORE.

## SCOTLAND.

## ABERDEEN.

*Report, by Consular Agent Ramsay, on the trade and navigation of Aberdeen for the year ending September 30, 1879.*

I beg to make the following report on the trade and navigation of Aberdeen for the past year:

The following is a detailed list of the principal exports declared at this agency for the year now ended, September 30, 1879, compared with those of three previous years, viz:

Articles.	1875-'76.	1876-'77.	1877-'78.	1878-'79.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Polished granite .....	44,200 14 6	25,396 2 10	20,250 19 5	18,915 11 4
Paper .....	7,118 3 4	4,720 17 3	2,961 4 10	2,406 3 7
Woolen goods .....	2,358 16 3	964 8 9		3,961 4 3
Linen goods .....	33 2 1		106 14 8	2,332 1 8
Spirits and wines .....	273 5 7	257 10 3	204 8 8	143 18 11
Miscellaneous .....	474 1 9	548 14 11	438 3 8	48 2 6
Total .....	54,458 3 6	31,887 9 0	24,030 11 3	27,805 2 3

The total amount of declared exports for the past year is £27,805 2s. 3d. compared with £24,030 11s. 3d. for the previous year, showing an increase of £3,774 11s. There is a decrease on polished granite of £1,344 8s. 1d. (and this sum would have been larger but for the exportation of a monument of granite in April last, valued £3,537 6s. 6d.), and on paper of £555 1s. 3d. The increase is chiefly on woolen and linen goods, and the trade in these manufactures is expected to increase. The number of invoices certified was 210 against 252 for the previous year, showing a decrease of 42.

The year 1878 has been one of the worst years for ship-building in Aberdeen that has been experienced for a very long time, and there is very little indication of improvement. The ships launched in 1872 were 17 in number, and tonnage 11,449; and in 1877, 10 in number, and tonnage 9,477; and in 1878, 10 in number, and tonnage 7,403.

The shipping at the port, notwithstanding the great depression in trade, is satisfactory:

Description.	Number.	Total tonnage.
Vessels on the register January 1, 1878 .....	221	114,069
Struck off during the year .....	15	3,714
Leaving .....	206	110,355
Added during the year .....	14	7,434
On register December 31, 1878 .....	220	117,789

The vessels struck off consisted of 13 sailing vessels and 2 steamers, and those added consisted of 4 sailing vessels and 10 steamers, showing how steamers are gaining on sailing vessels. The tonnage on the register in 1877 was 114,411, showing an increase of 3,720 tons in 1878.

The number of vessels which entered the port was 2,196, and the number which sailed outward was 2,163. The total tonnage arrived was

546,671, showing an increase of 35,692 over the previous year. There is an increase in the amount of shore dues paid on shipping of £582 8s. 4d., while the increase on shore dues paid on imports amounts to £1,837 12s. 10d., and exports to £355 5s. 2d., giving a total increase on the amount of shore dues of £2,775 6s. 4d. The total amount collected was £34,674 13s. 1d. The largest increases on the imports are on miscellaneous goods £459; on wood of £632; on flour of £191; on wheat of £255; and on coals of £133; the largest decrease being on oats £248, and on esparto grass £102. The largest increases on the exports are £134 on miscellaneous goods; on corn, £49; on wood, £1,040. These figures are very satisfactory, and show that the trade of the port is in a prosperous condition.

The population of the city is about 97,000.

JOHN RAMSAY.

UNITED STATES CONSULAR AGENCY,  
Aberdeen, October 1, 1879.

### DUNDEE.

*Report, by Consul McDougall, on the commerce and industries of Dundee for the year ending September 30, 1879.*

In compliance with paragraph No. 380 of Consular Regulations, 1874, I have the honor to send you the following report for the year ending September 30, 1879, respecting the trade and navigation within this consular district. I regret that I am unable to supply the particulars required by forms 127 and 128, prescribed in aforementioned paragraph. This could only be done from information to be obtained from the custom-house officials here by favor and at considerable expense. I am, however, in a position to complete form 129 referred to in said paragraph. This statement I have placed in this report under the heading of navigation. I have also endeavored to collect as many statistics and facts as possible bearing on the information required by your department.

### THE JUTE TRADE.

I have again to report that this great staple branch of industry in this locality has been very much depressed during the most part of the past year. Turning first to the importation of the raw material—jute—the year to date exhibits a considerable increase in the quantity of jute imported direct from India to Dundee over the past and previous years.

From January 1 to September 30, this year, there arrived in Dundee docks 72 jute vessels, of 99,418 tons, bringing 679,073 bales. The arrivals during the same period last year were 66 vessels, of 89,545 tons, bringing 606,613 bales. There is therefore a balance in favor of 1879, as compared with 1878, of 6 vessels, or 9,873 tons and 72,460 bales.

The number of ships at sea is 7, of 9,651 tons; last year at the same period there were 6 vessels, of 6,589 tons, thus showing a difference of 1, or 3,062 tons, in favor of 1879.

The number of vessels loading and chartered at Calcutta and Chittagong is not so favorably marked as that of 1878. Up to the latest advices 21 vessels, of 29,895 tons, are chartered to load jute for this port. Last year at this time there were 27 vessels, of 38,187 tons, thus showing a falling off for 1879 of 6 vessels, or 8,292 tons. Five of the sailing ves-

sels at sea, and two steamers which appear in the chartered list, may be expected to arrive within 1879. There will, therefore, in all probability arrive at Dundee with jute during this year 79 vessels, of an aggregate tonnage of 108,000 tons. These figures have never been exceeded. The only approach to this large tonnage was in 1873, when 81 vessels, of an aggregate tonnage of 101,446 tons, arrived with cargoes amounting in the aggregate to 709,871 bales.

Notwithstanding the dullness of this trade, both here and elsewhere, 1879 promises to be the largest in direct import of jute to Dundee of any previous year in the history of the jute trade.

The following table gives the imports of jute direct, and from all sources, for the years mentioned.

Years.	Direct importation.			Total importation.
	Vessels.	Tonnage.	Bales.	Tons.
1870.....	26	30,317	207,208	81,740
1871.....	57	60,690	473,097	102,844
1872.....	77	94,450	649,677	127,190
1873.....	81	101,440	709,871	143,150
1874.....	62	77,401	523,197	117,375
1875.....	62	83,252	573,230	113,930
1876.....	63	87,540	582,249	118,571
1877.....	50	68,568	456,209	107,616
1878.....	72	97,353	658,585	128,508
1879.....	79	*108,000		

\* Estimated.

This table shows that the direct quantities of jute imported into Dundee has increased remarkably within the past two years. This year it is estimated that the total quantity of jute imported into Dundee will touch if not exceed the amount imported in 1873, the year when the maximum was reached. The foregoing figures prove that the stock of jute has been abundant during the past year, and as a natural consequence prices have continued weak all through that time; and, indeed, have come steadily down, the quotations being lowest in March and April. Since May they have improved slightly.

For manufactured jute, the demand during the most part of the past year has been very slow and unsatisfactory, and in order to sell goods at all, prices have been kept at the lowest possible point, it being difficult to get more than bare cost for ordinary yarns and regular fabrics, while in many cases serious losses have been encountered. From last year at this date prices kept drooping, until the middle of May, this year, when they reached the lowest point ever yet quoted for standard burlaps. Since that time, however, prices have taken a turn for the better, stimulated no doubt by the large shipments of jute fabrics that have been recently forwarded to the United States, as my statement of detailed exports to the United States during the four quarters of the year ending September 30, 1879, transmitted to the Department of State, shows.

The demand from the United States for jute goods having shown some improvement lately, has given rise to hopes that at last the tide of trade has turned the right way. What with raw material at so low prices, and cheaper labor (the wages of the workers having been again reduced during the year), many manufacturers think that they can compete more favorably with foreign competition than they have been able to do during the past four or five years. It is feared, however, that the return to wonted activity will be slow; and as Dundee now no longer enjoys the monopoly of this trade, the profits in good times will not be so enormous as formerly. To prove the increase in the export of jute

goods to the United States during the past year, I give you below an abstract of my detailed statement, showing the value of declared exports from this consular district to the United States, during the four quarters of the year ending September 30, 1879. It is almost entirely jute goods that make up the increase thus shown:

## ABSTRACT.

	Quarter ending.				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Total at Dundee for 1879 .....	\$1, 100, 348 26	\$1, 061, 531 39	\$1, 320, 348 08	\$1, 495, 094 16	\$4, 977, 319 89
Total at Aberdeen for 1879 ....	26, 443 05	17, 069 34	39, 459 11	52, 179 43	135, 150 93
Total from this district for 1879	1, 126, 789 31	1, 078, 600 73	1, 359, 807 19	1, 547, 273 59	5, 112, 470 82
Total from this district for 1878	959, 184 26	1, 265, 742 54	1, 177, 093 25	1, 239, 510 42	4, 641, 560 47
Increase .....	167, 605 05	.....	182, 713 94	307, 733 17	470, 910 35
Decrease .....	.....	187, 141 81	.....	.....	.....
Decrease in 1878 .....					\$184, 027 65
Decrease in 1877 .....					647, 555 58
Decrease in 1876 .....					526, 799 07
Total decrease in the three years, 1878, 1877, 1876 .....					1, 358, 352 90

This table exhibits a remarkable increase during the first and last two quarters of this year, but more especially during the last one, which is nearly equal to the two former added together.

This fact gives a clue to the gradual rise in prices that has taken place within the last two to three months. The increase is further interesting when it is observed that on each of the three years immediately preceding 1879 there was a decrease amounting in the aggregate to the enormous sum of \$1,358,352.90.

Dundee, to keep its own in the American market against the increasing and keen competition that it meets with there, will have to be economical and skillful in the management of its factories, and also to display taste in the production of their jute fabrics. There is a wide field open for the tasteful adaptation of jute materials to various purposes. Some manufacturers in this district are laying themselves out to cultivate this field, and are now making articles of an artistic description, such as imitation Brussels carpets, crumb-cloths, curtains, &c., which look substantial and are pleasing in appearance. This class of goods is, however, manufactured on a limited scale, the coarse stuffs being what is generally woven. This indifference on the part of the Dundee jute manufacturers to adapt themselves to circumstances is regarded by a number of practical men in this community as a mistake. It is said that much of the machinery running in the works here would be suitable for manufacturing a higher-class article, for which a trade could be fostered if turned out cheap enough. If, as it is believed, the jute mills in India belonging to joint stock companies will ultimately become the properties of individuals, Dundee may expect to be hard run in the market in the coarser fabrics. The jute mills in India, and especially in Calcutta, belonging to companies, have not on the whole been a financial success. This, however, is generally admitted to be due to incompetent and expensive management. Where the mills are the property of private owners they have yielded returns that are considered satisfactory. In Calcutta, labor, fuel, and the raw material are cheap and abundant,



and procurable on the spot, and the mills are in the midst of a market where their productions are required for local consumption, or can be conveniently shipped. It therefore appears only a question of time when men of practical ability and training in this branch of business will avail themselves of the promising opportunities thus afforded to them, and carry on these concerns with success, which must, of course, tell against Dundee. As it is, the Calcutta and Indian exports of manufactured jute have expanded considerably during the past five years, as will be seen from the following figures:

*Value of the exports of manufactured jute from India.*

	Rupées.
1873-74.....	2, 016, 686
1874-75.....	2, 386, 398
1875-76.....	4, 891, 813
1876-77.....	7, 194, 776
1877-78.....	7, 711, 270

The manufactures consist mostly of bags, corn sacks, rice bags, and wool packs. Australia is the largest customer of the Indian mills, and following next is the United States, China and the Straits, Egypt, and the various Asiatic markets. All these places were only a few years ago supplied entirely from Dundee; now there the Calcutta goods are sold cheaper in some cases than they can be made in Dundee, and in the mean time there is no market at all for Dundee jute goods in Australia even at the low prices prevailing.

These are stern facts which Dundee manufacturers must weigh and consider if they mean to keep abreast of the times. The Calcutta competition is regarded here by some as not after all so formidable, but if the past ratio of increase, made apparent by the foregoing figures, continues, it will give Dundee manufacturers trouble, as indeed it has already done. This competition, of course, will be the more difficult to face if these works become private properties, as before hinted. Meantime the outlook for the trade is more cheerful for the ensuing year than it was at this time last year, on account of the extraordinary revival of business that is going on in the United States; and there are numbers of business men who are of opinion that the worst has been seen and that matters have really begun at last to mend, although slowly yet surely, to such an extent as will soon leave a fair margin of profit to all concerned. This, it is to be hoped, is not too sanguine a view to take of the future of the trade.

LINEN TRADE.

This department of business has also felt the effects of commercial stagnation severely during the past year. The following are the imports of the raw material required for this branch of trade:

Years.	Flax.	Tow.
	<i>Tons.</i>	<i>Tons.</i>
1871.....	39, 391	11, 544
1872.....	34, 053	6, 558
1873.....	32, 723	6, 145
1874.....	36, 074	7, 773
1875.....	22, 572	6, 569
1876.....	21, 413	5, 869
1877.....	38, 286	10, 740
1878 { Estimated.....	20, 358	5, 894
{ Actual.....	22, 132	5, 455
Nine months ending September 30, 1879.....	17, 811	5, 159

This statement shows a falling off since 1877. This year it is estimated the import will be less even than that of last year. It is of itself sufficient comment on the state of this branch of the trade when it is remarked that notwithstanding the very heavy decrease in the average importation of the past four years, stocks have been found more than sufficient, and prices have continued to give way from sheer want of demand until quotations are now a considerable percentage under the rates current at this time last year.

The manufacture of linen goods during the past year has not been a profitable business. The production has all through exceeded the demand. Only a very quiet business has been done with the United States during the first nine months of the past year, and the same may be said of the whole of the foreign trade.

This state of matters, combined with the abnormally low rate at which cotton goods have been selling, have kept prices at the lowest point.

A comparatively moderate business has been done with the United States during the past quarter in linen goods, but not to the extent to have a tangible influence on the market. The value of linen goods is always in some measure affected by the price of cotton, and whenever this material is relatively cheaper than flax the demand for linens diminishes in consequence. At present the competition in the cotton trade is very keen. It is observed here that the United States has been developing its home trade in this article very largely, and not only selling goods on this side against home manufacture, but these are also being substituted to a considerable extent for some classes of cheap linen goods which used to be shipped from this market. For these reasons it has been found in many cases impossible to obtain cost out of linens even with the present low prices ruling for flax and yarns, and accordingly the cheaper and lower qualities have to be made, and the manufacture of union goods—half cotton and half linen—is being carried on largely in this district with a view to reduce cost, seeing so poor prices are obtainable. It is to the United States manufacturers that they look in the present crisis, and they are confident that the wonderful revival in business and increasing commercial confidence that is going on there will react favorably on this country and on the linen trade of this district.

#### PAPER STOCK.

A noticeable feature in the exports to the United States this past year is the large quantity of this article that has been sent out, amounting to \$210,000 and upwards. A considerable portion of this has gone direct from here to the United States. No less than 7 vessels carrying 9,460 bales, weighing 2,600 tons, of this article have left this port for New York during the past year. These vessels have all been chartered and filled by one paper stock merchant in Dundee, who, it may be said, is the only party that ships this article to the United States from this locality. Five or six years ago scarcely any paper stock was exported from this district to the United States. The increase that has taken place will be seen from the following figures:

#### *Paper stock exported to the United States.*

1874.....	\$2, 175 00
1875.....	None.
1876.....	1, 225 40
1877.....	68, 897 37
1878.....	71, 977 70
1879.....	210, 953 16

## SHIP-BUILDING

at this port has declined considerably during the past two years, in sympathy with the paralyzed state of commerce that has existed. The actual decrease in the tonnage launched during 1878 is not indeed so very large, amounting to only 1,014 tons. It must, however, be remembered that 1877 was considerably under the average of the years immediately preceding, and a glance at the subjoined comparative table will show that, compared with 1876 and even 1875, 1878 exhibits a great falling off in the ship-building here. The want of animation in the ship-building yards has not been compensated as in some former years by activity in repairing vessels, and the ship-carpenters have consequently been far from busy, and have had again to return to 54 hours' work per week instead of 51 hours' labor, the time they have worked for some years past. They also are presently on strike, and have been so for three weeks, against a reduction proposed of 2s. 3d. per week on their wages. No approach has yet been made either on the side of the masters or the men, and there is no present prospects of the settlement of the dispute.

These facts give evidence of the dullness of this branch of industry. It is expected that with the clearing of the financial and trading atmosphere a return to new life and energy will take place in the ship-building here. Annexed is a statement of the number of ships and amount of tonnage launched and on hand since 1871:

Years.	Launched.		On hand.	
	No. of vessels.	Tonnage.	No. of vessels.	Tonnage.
1871.....	11	9,400	11	13,572
1872.....	13	13,049	7	7,190
1873.....	10	9,293	8	9,107
1874.....	11	11,165	11	10,540
1875.....	23	14,998	19	14,095
1876.....	23	15,356	15	11,720
1877.....	18	12,135	7	7,590
1878.....	12	11,121	11	9,990
1879.....	12	7,482	.....	.....

\* For nine months ending September 30.

## WHALE AND SEAL FISHING.

Twelve vessels prosecuted the seal-fishing in 1878, four going to Labrador off Newfoundland and eight to Greenland. The total catch at both of these fishing-grounds was, in 1878, for 12 vessels, 77,411 seals, estimated to yield 1,106 tons oil; in 1877, for 13 vessels, 76,000 seals, estimated to yield 1,092 tons oil; increase in 1878, 1,411 seals and 14 tons oil.

The seal-oil was valued then (1878) at £32 per ton, while the skins averaged about 5s. each. Calculating the 1,106 tons of oil got in 1878 at £32, gives £35,392, and 77,411 skins at 5s. each, would yield £19,353, so that the value of the seal-fishing in 1878 was £54,745; in 1877 it was computed at £53,944, showing an increase for 1878 of £801.

Unfortunately no fewer than seven vessels returned clean out of the thirteen that engaged in the whale-fishing in 1878, while one was lost which had one fish. The total catch at the Greenland whale-fishery

was, in 1878, for 13 ships, 6 whales, estimated to yield 114 tons oil and 6 tons bone. Then the selling price of whale-oil was £35 per ton, and bone on an average of £1,500 per ton. The value of the oil at the price stated would be £3,990, and of the bone £9,000; together, £12,990. Add value of seal-fishing for 1878, as shown above, £54,745, gives a total of both fishing for 1878 of £67,735, from which must be deducted the expenses of the fleet, which are necessarily very heavy.

In 1877 the total value of both fishings was computed at £146,869. There is, therefore, a deficiency in 1878, as compared with 1877, of £79,134.

In 1879 four vessels left Dundee and went each two voyages between Newfoundland and Labrador to the seal-fishing there. Their catch was 71,700 seals, estimated to yield 680 tons oil. There left Dundee for the Greenland seal-fishing twelve vessels, which brought 32,340 seals, estimated to yield 458 tons oil; total, 104,040 seals, estimated to yield 1,138 tons oil. These figures are not exact, but collected as correctly as possible, no returns of an official kind as yet having been issued. The number of seals caught at Labrador and Greenland in 1878, as shown, was 77,411 seals, estimated to yield 1,106 tons oil, showing an apparent increase for 1879 of 26,629 seals and 32 tons oil.

At present seal-oil is valued at £29 per ton, and skins at 4s. each. Taking, therefore, the 1,138 tons oil and the 104,040 skins got this year at these prices, gives £53,810. The value of the seal-fishings in 1878, as shown, was computed at £54,745, showing an apparent increase for 1879 of £935.

As already stated, these calculations are based on approximate figures for 1879.

It will be noticed from the foregoing figures that the yield of oil from the Greenland seals is much greater than from those of Labrador off Newfoundland. The reason given for this is that the stipulated close-time each year to 3d April, observed in Greenland by most nations' vessels that go there sealing, gives time for the seal to mature and fatten. This close-time is not yet in operation in Labrador, hence the most of the seals caught there are young, and consequently do not yield so largely.

One of the vessels that went to the whale-fishing this year was caught in the ice in Lancaster Sound, and became a total wreck. So suddenly was the ship nipped by the ice that the men had barely time to take to their boats, and so lost much of their clothing. The disaster happened at ten o'clock in the forenoon, and in fifteen minutes afterwards not a spar of the vessels was to be seen. The men had to remain on a floe of ice from the time of the accident until six o'clock the following evening, when they were picked up by two of the Dundee whaling-ships.

It is feared the whale-fishing this year will be under the average; the ground is said to be becoming less prolific every year. This year all the large whales have been caught in what is known as the "middle ice," those got in Lancaster Sound yielding only from three to six tons of oil. No bone is obtainable from these small fish, so that the supply of whale-bone this year is likely to be very deficient. The whaling fleet this year, as a whole, is expected to prove very unremunerative. The four vessels engaged at the Labrador seal-fishing had fair cargoes, but the Greenland seal-fishing was, as shown, virtually a failure. The total catch of the Greenland whale-fishing fleet to date this year is reported to be about 652 tons oil and 6 tons of bone. For the sake of comparison the results of seal and whale fishing for ten years are given below :

## SEAL FISHING.

Years.	No. of ships.	No. of seals.	Tons of oil.
1869 .....	11	45, 600	480
1870 .....	9	90, 450	870
1871 .....	9	65, 485	648
1872 .....	11	40, 621	429
1873 .....	11	25, 594	266
1874 .....	11	44, 252	577
1875 .....	12	45, 295	455
1876 .....	12	57, 776	635
1877 .....	13	76, 000	1, 092
1878 .....	12	74, 411	1, 106
1879 .....	16	*104, 040	*1, 188

## WHALE FISHING.

1869 .....	10	140
1870 .....	6	700
1871 .....	8	1, 165
1872 .....	10	1, 010
1873 .....	10	1, 852
1874 .....	9	1, 280
1875 .....	12	765
1876 .....	12	824
1877 .....	13	955
1878 .....	13	114

\* Estimated.

## HERRING FISHING.

At some of the fishing stations on the coast near by Dundee there were pretty large takes of winter herring, and at other places just in the immediate vicinity of these successful spots the takes were small. Altogether the catch has been very unequally distributed over the fleet. At many of the fishing villages this enterprise has been all but a complete failure. These remarks can also apply to the summer fishing. It may be here mentioned that there has been great advancement made within recent years in the fishing villages. The social habits of the fishermen have greatly improved. Various agencies have brought about this consummation, chief among which is the temperance movement.

## ENGINEERING AND IRON-WORKING TRADES.

The employers of iron-workers pointed out to their employes in the spring of this year that, in the exceptionally dull state of trade, it was impossible to undertake any contracts unless the workmen consented to the extension of their hours of labor from 51 to 54 hours per week, without an increase of pay. A meeting of the workers was held, and, after fully discussing the whole matter, they deemed it advisable, in these dull times, and the fact that so many men were going about idle, to accept the masters' terms. This took place in May this year. An extension of the working hours from 51 to 54 per week is being rapidly effected throughout Scotland, and the men see that it is useless in the mean time to resist the movement.

## HOUSE-BUILDING TRADES.

Wages of workmen engaged in these trades have come down on an average from 10 to 15 per cent. during the past year. This, together with the reduction that took place the previous year, gives an average

fall of wages in two years from 15 to 20 per cent. The great scheme of towns improvements, which has been on the way in Dundee for the past five or six years, is practically at a standstill, so far as replacing the houses demolished is concerned, and there is no necessity for building to provide accommodation in room of those houses pulled down, as this was far more than met by the immense blocks rushed up within the last four to five years. Accordingly there are hundreds of working-men's houses unlet, and many shops in the outskirts of this town which may be had at greatly reduced rents. This surplus of house accommodation, being rather removed from the middle of the town, has not been the means of reducing the rents in a central locality. The prospect of the building trade, for the above reasons, during the winter, is certainly gloomy.

#### LEATHER TRADE AND BOOT AND SHOE MAKING.

This business has only been moderately busy during the past year. Shortly after the New Year, through the slackness of trade, one of the manufacturers of boots and shoes said he was compelled to reduce the wages, which are paid on the piece-work principle. This action was resisted on the part of the workers by a strike which was protracted, but resulted in the workers having to give way. The manufacture of boots and shoes in Dundee has risen to be an important industry within the past decade, and the number of hands employed is considerable. The finest machinery is used in this manufacturing industry, a great portion of which is United States patented and manufactured. One firm in this town has a splendid assortment of United States boot-making machines in their establishment. The tanneries have had quiet trade during the year; but it is understood the wages of the workmen have not been interfered with.

#### MARMALADE AND CONFECTIONERY MAKING

has, as usual, been brisk during the past year. Large quantities of fruit and berries have been imported into Dundee from the continent and made into marmalade and jam of all kinds, which is exported to various parts of the world. This business continues to extend in Dundee, and the town is now as well known for its marmalade as for its manufactures of jute.

#### IMPORTS FROM THE UNITED STATES.

*Fresh beef.*—A shop has again been opened in Dundee for the sale of this article, and is succeeding as well as can be expected. It is apparently better managed than the one which before had to be closed. The people here, however, are slow to take to the United States fresh beef; they will rather pay a much higher price for the home article, though a large quantity is undoubtedly sold as home-fed which is really imported from the United States, the fact being carefully concealed from the purchasers. There, however, is no aversion to the

*Canned meat from the United States*, which is now consumed by all classes very largely and now thoroughly established as an article of food, and it has done infinitely more to keep down the price of home-fed fresh beef than the United States fresh beef has done.

*Canned salmon and other fish prepared in the United States.*—The trade in this article is increasing, as it is now sold at a price so low that the poorest can afford to use it. It, however, is not confined to this class, but may be seen frequently on the tables of the wealthy.

*United States joinery.*—A quantity of machine-made doors, window-sashes, and other joinery was imported by a timber merchant in Dundee from New York this year, and was exposed at one of his usual auction sales. The excellent workmanship and good material of these doors surprised the makers of like articles who attended the sale, especially when it was seen that they were sold below what they could be produced for in Dundee. It is understood that a further lot of wood manufactures is on the way from the United States to Dundee.

United States agricultural and horticultural implements, and also machines used for domestic purposes, may be seen in the stores of the large Dundee dealers in these articles. Some of these merchants make a kind of specialty of United States goods. A visit from this office was paid to the Highland and Agricultural Society of Scotland's fifty-second show, held this year in Perth, which city is within this consular district. At this show as many as possible of those connected in any way with agriculture in this country meet annually. The assemblage at this show of landlords, farmers, and those interested in the cultivation of the soil and the rearing of stock is by far the largest that takes place each year in Scotland. The show therefore presents the best opportunity during the year for the makers of agricultural implements and machinery and every other kind of articles to exhibit their productions there, and this is done on an immense scale. There are few interested parties but avail themselves of this yearly chance of showing their goods before the large multitudes (55,000 to 60,000 this year) that flock to the show. United States manufacturers of agricultural implements and other articles, and their agents or factors, seem also to be fully alive to the importance of placing their goods for inspection before the crowds that attend such shows in this country; hence there was a capital and extensive display of United States agricultural implements and other articles at the Perth show this year. Messrs. G. Rollins & Co., Old Wharf, London, United States factors, had a most varied and complete exhibit, ranging from United States egg-beaters to the empire fan-blowing forge, all the articles constructed with the minimum of the most durable material compatible with practicability and strength. Among other things, and perhaps the most novel and important, was a 4-ton steelyard, or weigh-bridge, manufactured by Fairbanks & Co., of London and New York. The distinguishing feature of this machine was that it weighed both horse and cart, simultaneously, with mathematical exactness, and it could give the weight of 2 pounds up to 4 tons. It has been more generally adopted in other countries than Scotland, but its accuracy and suitability make its introduction probable in this country soon.

Not unworthy of mention were the Archimedean lawn-mowers, which cut grass wet or dry. Instead of perambulators, there appeared baby carriages, single or double, manufactured by the American Baby Carriage Company. Messrs. Eglin & Gardner, United States factors, York Street, Glasgow, exhibited a variety of improved Howe scales. So nice was the 4-ton weigh-bridge that a gentleman who was standing on the frame failed to turn the scales, but on a newspaper being handed to him it turned them at once. These scales were adapted for all kinds of weighing, and can be adjusted to the standards of all nations. The hay, farm, and wagon scales were remarkable for their simplicity of construction. Besides these there were to be seen on this stand spring butts, flower-pots, wire-fencing, &c., and a splendid lot of wood manufactures, consisting of chairs, doors, sashes, bound linings, shutters, moldings, &c. The workmanship of the walnut, ash, and oak chairs, and of the doors, &c., was of a superior character. Geer's American spring butts and

Hercules door-spring, constructed on an improved principle, also appeared, and the United States Yale lock, which can be applied to almost every purpose for which locks are used, and also gives positive security against skeleton keys and nippers.

Messrs. J. & H. Keyworth, United States factors, Liverpool, showed some celebrated United States reapers and mowers. The "Adriance Buckeye" mower was attentively examined. Its salient features are fewer cog-wheels, extreme lightness of draught, combined with great strength, entire freedom from side-draught, and adaptability to all kinds of land. The Adriance self-raking reaper was another machine much looked at. It is light, strong, easily worked, completely under the control of the driver, has cased gearing, no weight on the horse's neck, and no side draught. This machine can be adjusted automatically, and for the above advantage bears favorable comparison with any in the market.

There was also the American patent Galloway self-acting rake, which has this recommendation, that no check to the horse is given by the action of the gearing which is effected by a skid acting in a groove on the inside of the naves. Perry's New York hay tedder, United States patent grind-stones, especially adapted for mowing and reaping machines, complete the principal of these United States exhibits. Lastly the tinned corned beef and compressed hams, that have revolutionized the meat market of this country, were on view in a pyramid by Messrs. Barclay & Brand, sole agents in Scotland for the Wilson Packing Company of the United States. Altogether the large display at this show of United States agricultural implements and other articles and samples was a most interesting one. On interviewing the United States exhibitors at this show, it was elicited that they had not done much business there. In one case, the exhibitor said it would cost him £150 to put down his goods on the ground, and for other expenses, whereas he had only sold £70 worth of goods altogether. It was explained, however, that it was more for advertising purposes that these goods were exhibited than with the expectation of doing business on the spot.

#### AGRICULTURAL DEPRESSION.

Much has been said and written within the past year on the subject of the agricultural depression existing, and many cures have been proposed, in order to bring about a more satisfactory state of matters. One of the remedies proposed is to reduce the wages of agricultural laborers; this has been done already a little, but no appreciable relief from that source may be expected, as the laborers—Scotch laborers at any rate—would rather emigrate to the United States or Canada than submit to be much lower paid. Permanent reduction of farm rents is regarded as the only true remedial measure that will enable farmers to compete with foreign producers, and at the same time to make a living. Some landlords in this locality have abatements on their last half year's rents of from 10 to 20 per cent.; this, however, has not been general. Agriculturists think that circumstances now demand permanent reductions of farm rents, and they believe this will eventually take place. The agricultural depression in Britain has been so great that the British Government has appointed a royal commission to inquire into the causes to which it is owing. Two of the commissioners are presently in the United States on this business. The general heads of inquiry agreed upon are (1) condition of farms, (2) condition of farmers, (3) the laborer, (4) land laws, (5) land tenancy, (6) agricultural education, (7) condition of estates, (8) agricultural statistics to be furnished by the board of trade, (9) re-



turns of imports and exports of agricultural produce to be furnished by the customs, and (10) importations of agricultural produce from foreign countries. A vast deal of facts and information will undoubtedly be elicited by this commission, which will be published for the benefit of the agricultural interest of this country.

## RAILWAYS.

The Scotch railways have a net-work of iron roadway of more than 2,500 miles, and give employment to thousands. These railways earn and distribute annually more than £7,000,000 of money. These large undertakings have all lost much revenue through want of traffic, occasioned by commercial stagnation. So closely allied is the commerce of the country with the railway system that what affects the one is quickly reflected by the other. The first six months of this year, compared with the same period last year, show a decrease in the revenue of Scotch railways of nearly £200,000. This gives an idea of the absence of commercial activity in Scotland. The low receipts this year of these railways have realized small returns to their shareholders, and some of these concerns have paid no dividend at all. The following table shows the miles opened and the receipts of the several railways for the week ending October 5, 1879:

[Increase, +; decrease, —.]

Name of railway.	Week ending—	Miles opened.		Traffic.			Total receipts.			No. of weeks.
		1879.	1878.	1879.	1878.	Difference.	Current half-year.	Corresponding period, 1878.	Difference.	
Caledonian.....	Oct. 5	756	748½	53,619	58,157	—4,538	534,976	584,711	—49,735	10
Glasgow and South-western.....	Oct. 5	323½	323½	19,577	19,944	—367	210,584	216,801	—6,217	10
Great North of Scotland.....	Oct. 5	270½	270½	6,190	5,981	+209	57,959	56,098	+1,861	9
Highland.....	Oct. 5	245½	245½	7,194	9,120	—1,926	37,327	41,520	—4,193	5
North British.....	Oct. 5	944½	938½	45,447	49,481	—4,034	464,393	511,018	—46,625	10

## IMPORTS AND EXPORTS.

The principal articles imported and exported at the port of Dundee in two years ending May 31, 1878 and 1879, respectively, are seen from the under-noted comparative statements.

## IMPORTS.

Articles.	Years.		1878.	
	1878.	1879.	Increase.	Decrease.
Flax:				
Foreign..... tons.	27,630	18,803		8,827
Coastwise..... do.	369	832	463	
Total flax.....	27,999	19,635		8,364
Flax codilla:				
Foreign..... tons.	9,400	4,343		5,057
Coastwise..... do.	488	126		362
Total flax codilla.....	9,888	4,469		5,419

## IMPORTS—Continued.

Articles.	Years.		1878.	
	1878.	1879.	Increase.	Decrease.
<b>Hemp:</b>				
Foreign ..... tons.	924	885		89
Coastwise ..... do.	318	156		103
Total hemp .....	1,242	991		251
<b>Hemp codilla:</b>				
Foreign ..... tons.	159	62		97
Coastwise ..... do.				
Total hemp codilla .....	159	62		97
<b>Jute:</b>				
Foreign ..... tons.	95,297	123,569	28,272	
Coastwise ..... do.	25,600	10,704		14,896
Total jute .....	120,897	134,273	13,376	
<b>Lime</b> ..... tons.	4,908	3,407		1,501
<b>Coals:</b>				
Scotch ..... do.	8,957	15,690	6,733	
English ..... do.	145,543	144,046		2,497
<b>Timber</b> ..... loads.	47,606	29,999		17,607
<b>Iron</b> ..... tons.	82			82
<b>Guano</b> ..... do.	1,221	1,018		203
<b>Tar</b> ..... barrels.	3,830	1,488		2,344
<b>Whale and seal blubber</b> ..... tons.	2,447	1,308		1,139
<b>Whalebone</b> ..... cwt.	867	88		1,779
<b>Flour</b> ..... tons.	4,730	2,862		1,868
<b>Wheat</b> ..... do.	9,689	10,581	872	
<b>Indian corn</b> ..... do.	4	742	738	
<b>Oats</b> ..... do.	529	696	167	
<b>Pease</b> ..... do.	52	21		31
<b>Tares</b> .....				
<b>Esparto</b> ..... tons.	3,296	3,685	389	
<b>Barley</b> ..... do.		60	60	

## EXPORTS.

<b>Linen and jute manufactures</b> ..... tons.	40,805	46,125	5,820	
<b>Bags and sacks</b> ..... do.	24,476	23,712		764
<b>Yarns</b> ..... cwt.	175,737	178,265		2,472
<b>Wheat</b> ..... tons.	410	796	386	
<b>Barley</b> ..... do.	639	5,220	4,581	
<b>Oats</b> ..... do.	194	288	94	
<b>Cattle</b> ..... number.		41	41	

## NAVIGATION.

*Shipping* hailing from the port of Dundee has, like the ship-building, felt the influence of the hard times. During the four years ending 1877 the tonnage owned and registered in Dundee increased rapidly, having nearly doubled during that period. In 1878 the increase got a check; still there has been a slight addition in that year, both to the number of vessels and to the tonnage. The number of vessels on the register in 1877 was 202, with a tonnage of 92,273 tons. For 1878 there were 203 vessels of 93,566 tons. The net increase for 1878 is thus 1 vessel and 1,293 tons. In 1878 the gross addition to the registry of Dundee owned ships has been 16 of 7,007 tons, and 15 vessels of 5,714 tons have been struck off. Of the additions 5 were wooden vessels, while of those struck off 8 were of that material. Two of the finest vessels belonging to Dundee were lost and never heard of in 1878. It was expected when the Tay bridge was finished that coal would be brought so cheaply to

the ship's side at the harbor in Dundee that large shipments would be taken by outward vessels. Partly, however, owing to the high rates charged by the harbor trustees on coal shipped at the docks, and partly, perhaps, to the general stagnation, and the short time that has yet elapsed since direct communication has been opened with the Fife coal fields, via Tay bridge, coal has not been very largely shipped. A magnificent block of dock warehouses have been erected, which will afford ample accommodation for the discharge of goods.

Annexed is a comparative statement of the shipping registered at Dundee since 1869, and a list of vessels added to and struck off the register since the 1st of January, 1878.

*Comparative statement of the shipping registered at Dundee.*

Years.	Vessels.	Tonnage.	Years.	Vessels.	Tonnage.
1869.....	168	43,351	1874.....	173	55,994
1870.....	189	55,075	1875.....	181	70,205
1871.....	191	54,863	1876.....	196	86,545
1872.....	179	53,279	1877.....	202	92,273
1873.....	167	50,579	1878.....	203	93,506

*Abstract of vessels registered at the port of Dundee at the end of 1878, with their tonnage.*

	Vessels.	Tonnage.
On the register December 31, 1877.....	202	92,273
S struck off during 1878.....	15	5,714
Added during 1878.....	187	86,559
	16	7,007
Total December 31, 1878.....	203	93,506

The following is a tabular statement showing the number and tonnage of vessels employed in the foreign and coasting trades of Dundee, both inwards and outwards, during the ten years mentioned, ending December 31, 1878:

Year.	FOREIGN TRADE INWARDS.							
	Cargo.				Ballast.			
	Sailing.		Steam.		Sailing.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1869.....	361	89,989	60	26,022	4	353	3	1,245
1870.....	399	100,068	95	52,853	1	299	1	199
1871.....	469	140,844	83	51,651	6	680	2	400
1872.....	438	154,004	70	38,149	2	309	2	1,167
1873.....	406	165,652	71	40,416	5	732	4	914
1874.....	453	157,995	79	43,322	3	496	3	1,123
1875.....	302	138,974	87	40,790	4	803	1	49
1876.....	392	163,347	109	45,288	1	92	2	1,334
1877.....	375	141,318	140	69,297	3	1,041	3	1,659
1878.....	350	150,573	100	52,019	1	439	2	714

Year.	FOREIGN TRADE OUTWARDS.							
	Cargo.				Ballast.			
	Sailing.		Steam.		Sailing.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1869.....	203	38,990	2	469	47	12,798	34	15,689
1870.....	202	36,304	13	5,084	76	23,042	27	12,492
1871.....	213	47,234	13	5,571	84	23,451	36	17,589
1872.....	215	37,795	6	3,159	54	17,082	33	15,669
1873.....	151	43,125	7	4,369	109	35,757	45	23,503
1874.....	214	58,319	13	4,776	66	24,262	34	14,386
1875.....	193	54,046	35	11,956	28	19,141	33	14,945
1876.....	288	79,233	54	17,969	45	23,706	40	16,322
1877.....	178	54,086	55	18,933	94	36,453	61	32,209
1878.....	217	67,438	24	11,515	50	21,914	37	17,872

Year.	COASTING TRADE.							
	Inwards.				Outwards.			
	Sailing.		Steam.		Sailing.		Steam.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
1869.....	768	72,656	423	145,521	225	16,394	221	73,447
1870.....	568	50,551	461	157,879	222	15,507	228	77,900
1871.....	427	36,026	495	171,009	276	24,403	256	86,749
1872.....	356	31,670	435	150,519	202	23,469	238	86,293
1873.....	572	50,107	425	144,764	201	19,224	260	92,066
1874.....	509	39,661	541	162,478	224	17,211	280	95,394
1875.....	463	33,028	593	179,881	290	44,945	290	101,935
1876.....	378	25,204	705	181,764	251	19,282	261	110,192
1877.....	372	28,385	707	195,315	210	17,741	336	113,057
1878.....	236	18,746	666	169,420	123	11,715	297	113,804

The next table is a return showing the nationality and the number and tonnage of vessels entered and cleared in cargo in the foreign trade during the year ending December 31, 1878, being Form 129 prescribed in paragraph 380 of Consular Regulations 1874, as nearly complete as can be obtained :

Nationality.	ENTERED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
British.....	130	97,108	84	45,423	214	142,531
Russian.....	8	1,768	4	2,567	12	4,335
Swedish.....	6	968	3	1,229	9	2,217
Norwegian.....	108	27,020	4	1,190	112	28,210
Danish.....	16	2,134	.....	.....	16	2,134
German.....	54	9,599	5	1,610	59	11,209
Dutch.....	15	2,158	.....	.....	15	2,158
French.....	6	1,160	.....	.....	6	1,160
Italian.....	6	2,521	.....	.....	6	2,521
Austrian.....	2	1,467	.....	.....	2	1,467
United States.....	4	5,650	.....	.....	4	5,650
Total.....	350	150,573	100	52,019	450	202,592

Nationality.	CLEARED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
British .....	21	10,327	45	33,621	66	43,948
Russian .....			8	1,786	8	1,786
Swedish .....			7	1,024	7	1,024
Norwegian .....	2	534	73	15,981	75	16,515
Danish .....			24	2,687	24	2,687
German .....	1	654	42	7,169	43	7,823
Dutch .....			13	1,828	13	1,828
French .....			1	165	1	165
Italian .....			2	612	2	612
United States .....			1	2,565	2	2,565
Total .....	24	11,515	217	67,438	241	78,953

## THE TAY BRIDGE.

This undertaking was adverted to in my previous reports, and in that of last year specially, in which I gave a diagram of the bridge and full details of the structure, and other particulars. It only remains for me to add to what I have already reported, that since the opening of the bridge an immense stream of traffic has gone over it, which has not been interrupted for a single moment by the slightest accident. The actual capital outlay on the bridge, its branches and approaches, including stations and a large piece of made-up ground, which gives most ample accommodation to the railway company, is stated at £945,652. This sum shows a tremendous difference between the official estimates issued in 1874, which were £365,000. Notwithstanding this extraordinary expenditure over the estimates, it can be justly admitted that the bridge is one of the greatest engineering triumphs of the age, although it is to be regretted that it was made for only one line of rails, when at about one-third more expense, it is reckoned, it might have been constructed to carry a double line. The bridge has undoubtedly contributed largely to passenger convenience and business facilities between Dundee and the South. A new line of railway connecting Dundee and Tay port by means of the bridge was opened this year, and it is expected the bridge will cause another branch line soon to be opened. Ground for villa residences has commenced to be fenced at the other end of the bridge. The atmosphere being salubrious, and the site beautifully situated on the banks of the river, and the ground offered very cheap, it is believed that a village of houses of the better class will soon spring up there. The honor of knighthood has been conferred on Thomas Bouch, civil engineer, chief engineer, and projector of the Tay bridge.

## THE FORTH BRIDGE.

I also referred to this bridge in my last year's report, in which I gave figures and particulars indicating the magnitude and proportions of this proposed gigantic structure. The erection of one of the great towers—600 feet high—was commenced in April, this year. Very little progress has, as yet, been made beyond this step. The contracts accepted by the Forth Bridge Company, it is stated, amount to £1,116,000, being the entire capital, minus £134,000 set aside as guaranteed shares by the North British Railway Company; both together amount to £1,250,000.

None of the capital of the bridge has, as yet, been subscribed, but the directors intend to take immediate steps for raising it, now that satisfactory arrangements have been concluded with suitable contractors for the erection of the structure. Calculated at 6 per cent., the interest on the capital of the company amounts to £75,000, and the mode in which this is to be met is somewhat as follows: At present the working expenses of the North British Railway Company, connected with the Granton and Burntisland Ferry traffic (across the firth of Forth), amount to £30,000 per annum, while an additional outlay of £10,000 is yearly entailed upon the company through the sending of traffic by the Caledonian Railway during stormy weather, or on account of other circumstances beyond their control. These sums make a total of £40,000, and the North British Railway Company accordingly guarantee to the Forth Bridge Company that they shall send that amount of traffic over the new line, while the balance of £35,000 is similarly guaranteed in three equal proportions by the North British Midland and Northeastern and Great Northern Railways. It is expected that the works will be completed and the bridge handed over to the company within five years from the 1st of January, 1880. When this bridge is erected passengers will go from Dundee to London in 12 to 13 hours, a distance of about 500 miles, without changing carriages.

#### UNITED STATES INVESTMENT COMPANIES IN DUNDEE.

These companies continue to prosper in a remarkable degree, paying large profits, and at the same time strengthening their reserve funds. The Oregon and Washington Trust Investment Company, limited, paid this year 10 per cent. dividend to its stockholders on the paid-up capital and added £500 to its reserve fund, which now stands at £9,000. The Dundee Mortgage and Trust Investment Company, limited, also paid 10 per cent. profit on shareholders' capital and increased the reserve fund by £5,414, which now stands at £15,000. The stock of these companies is selling at 15 to 20 per cent. premium. The Oregon and Washington Savings Bank, limited, a company with a small paid-up capital of £9,000, exclusive of money borrowed on debenture bonds, has paid this year 6 per cent. to its shareholders and created a reserve fund by putting aside £150 for that purpose. The Scottish-American investment trusts in Dundee, of which there are three, have been converted this year into a limited liability company. This has been necessitated through a decision of the master of the rolls in London, who questioned the legal status of such trusts. These trusts in Dundee have hitherto been most admirably managed concerns, and, in consequence, have been most extraordinarily successful financially. They have benefited largely by the resumption of specie payments in the United States, as the great mass of their investments was made when currency was at a discount of 10 to 16 per cent. Again, the calling in by the United States Government of their 6 per cent. bonds and issuing 4 per cents. instead has had the effect of advancing the value of their securities. These trusts' investments consist almost exclusively of railroad mortgage bonds, and these have specially felt the effect of the government refunding operations. Many who held United States 5-20 bonds bearing 6 per cent. interest, not being content to have their interest reduced to 4 per cent., have exchanged into good railway bonds. This, of course, has advanced the price of these bonds considerably. What with this enhancement of the value of these securities and undivided revenues, these trusts could return their certificate-holders' capital £1,100,000 and £250,000 in addition

But the members of these trusts do not desire to withdraw their capital; they have rather agreed to form themselves into a United States Investment Company, with their large paid-up capital of £1,100,000 and accrued profits, and retaining their present trustees as a directorate, with the same staff and management. It is specially gratifying to have thus to report so favorably of the Dundee United States investment companies.

#### LIBRARIES.

The Dundee free circulating and reference libraries, reading-room, and fine-art gallery, all in one building, is an institution maintained by a rate of one penny per £1 on the assessable rental of Dundee, and the opportunities thus afforded to the inhabitants of this town of borrowing works in every class of literature, and seeing works of art free, is fully appreciated, as proved by the large number of books issued every year, and by the great number of people that frequent these rooms. The art gallery is filled with pictures bequeathed and lent by citizens of this town and neighborhood. Dundee, if not the first, was among the first towns in Scotland that adopted, in 1869-'70, the free libraries act. The total number of books in both departments of the Dundee library is 32,014. A subscription library exists in Dundee which purchases the most recently published works of interest and ability, and these books, at the end of a year, are handed over gratis to the free library. From this source the library receives a large addition each year. In 1878, 344 volumes were thus presented. The circulation of books in 1878 in the lending department was 151,898, and the small number and value of books altogether lost—almost invariably cheap novels—prove the safety of not deterring, or, perhaps, preventing hundreds, possibly thousands, of poor or young people from becoming readers by insisting, as is done in many free libraries, on guarantees for the value of the books obtained. Novels show the largest yearly issue, then geography and travels, and next, miscellaneous literature, then magazines. The following figures show the number of volumes issued in the lending department since the library started to 1878:

Years.	Issue.	Increase and decrease.
1869-'70	133, 239	
1870-'71	123, 864	Decrease, 9,375.
1871-'72	126, 007	Increase, 2,143.
1872-'73	120, 419	Decrease, 5,588.
1873-'74	115, 158	Decrease, 5,261.
1874-'75	136, 162	Increase, 21,004.
1875-'76	143, 517	Increase, 7,355.
1876-'77	151, 327	Increase, 7,810.
1877-'78	151, 898	Increase, 571.

#### UNEMPLOYED IN DUNDEE.

During the past year much distress has prevailed among the poorer class of this town, thousands of which were idle on account of the almost unparalleled length and inclemency of winter and the depressed state of trade. A number of influential and benevolent gentlemen formed themselves into a committee for the relief of the destitute during the winter, and subscribed and collected money to the amount of £3,196, most of which was expended in distributing 893 tons of coal, 19,777 pecks (7 pounds) meal and flour, 12,473 pecks (28 pounds) potatoes, 5,466 pounds sugar, 5,575 2-ounce packets coffee, 716 (5 pounds) of biscuit,

3,873 pounds supplies of salt fish, bacon, or herrings, 8,501 4-pound loaves of bread, 62,130 coffee-house rations—value 2d (4 cents) each.

The organization of this committee was most complete, and was the means of relieving much destitution and misery by the substantial relief afforded. The town's commissioners also exerted every effort to provide work for the idle men, which materially assisted in alleviating the distress. At present there are a large number of persons idle in Dundee belonging to all trades and also laborers.

#### THE DUNDEE SAVINGS BANK,

Strange to say, has been but slightly affected by the depression of trade, destitution, and distress that has been so marked in Dundee during the past year, which demonstrates that the class who provide for contingencies are those who, as a rule, are careful of their employment. The following table shows the sums saved during the past three years to be growing gradually less, and the sums withdrawn rather more, but the amounts in both cases are comparatively small taking everything into consideration. The amount received (excluding interest) from depositors, was :

Years.	Amount received.	Amount paid.
1876 .....	£222,045	£196,308
1877 .....	220,173	208,334
1878 .....	213,796	212,911

The deposits of this bank are guaranteed by the British Government, and 3 per cent. is the rate of interest allowed thereon. The progress of the bank has been remarkable. In 1858 the total sum due to depositors was £91,371; it is now £510,287. Of the 19,832 accounts open in 1878, 3,530 were for deposits under £1, and 6,000 under £5. The following table shows the number of depositors and amounts due them by this bank during the past eleven years :

Years.	Number of accounts.	Amount due to depositors.
1869 .....	11,523	£229,773
1870 .....	12,297	256,400
1871 .....	13,428	286,630
1872 .....	14,846	323,383
1873 .....	16,074	353,646
1874 .....	17,228	367,771
1875 .....	17,907	409,558
1876 .....	19,023	447,080
1877 .....	19,504	471,660
1878 .....	19,832	485,866
1879 .....		510,287

These facts and figures testify that there is a large number of people in this community that are prudently economical in their habits.



## THE WATER SUPPLY OF DUNDEE.

The water supply belongs to the town and cost £385,585 7s., and is managed by the municipal corporation. The water is of excellent quality. The following table shows the average daily consumption from 1869 to 1878:

	Gallons.
1869 .....	2,500,000
1870 .....	1,930,000
1871 .....	2,855,000
1872 .....	3,014,000
1873 .....	3,168,000
1874 .....	3,209,000
1875 .....	4,100,000
1876 .....	4,652,000
1877 .....	4,757,000
1878 .....	5,282,000

## THE GAS-WORKS IN DUNDEE.

These are also the town's property, and managed by the same corporation. They cost about £125,000. Dundee claims to have the cheapest gas in Scotland, which is 3s. 5½d. per 1,000 feet.

The gas manufactured during the past ten years is seen from the following table:

	Cubic feet.
1869-70 .....	200,838,200
1870-71 .....	214,295,100
1871-72 .....	234,224,000
1872-73 .....	252,294,300
1873-74 .....	265,994,800
1874-75 .....	268,945,600
1875-76 .....	285,313,300
1876-77 .....	292,604,700
1877-78 .....	316,054,900
1878-79 (estimated) .....	320,000,000

Dundee has made several public experiments with the view of testing the utility of electricity as an illuminant. The albo-carbon process was also tried. Nothing practical resulted from these experiments in the way of adopting either of these modes of lighting.

## CRIME IN DUNDEE.

Crime has slightly decreased in Dundee during 1878, when 7,674 persons were apprehended against 7,772 in 1877. The decrease is all the more satisfactory, as in 1878, the police obtained powers to deal with offenses with which previously they had no cognizance, and having regard to the destitution that has been prevalent through want of work. The decrease is attributed to the manner in which persons found with intent to commit a penal offense had been punished, and also to the increased efficiency of the police force, and more especially of the detective staff which has been strengthened from time to time by constables in plain clothes where gangs of dangerous thieves were known to be at large. There were no serious crimes committed within the burgh that escaped detection during the past year. The frequent apprehension of habitual drunkards swells the number of persons apprehended. If these had only been credited with one appearance, the number would have been 6,125 instead of 7,674 in 1878. There were 3,440 persons in 1878 brought before the police magistrates for petty assaults or breaches of the peace against 3,401 in 1877. Drunkenness led to the commission of most of these crimes. There were 2,262 persons taken into custody

in 1878, charged with drunkenness, against 1,980 in 1877, showing an increase of 282 for 1878. The superintendent of police says:

It is difficult to account for this increase, more especially as trade has been in a depressed state during 1878, but as the food supply of many poor persons was during the winter months somewhat scanty, and as it is a well known fact that a small quantity of spirituous liquor will injuriously affect a person who is ill supplied with food, the cause of the increase may in this way be to some extent explained.

The strength of the police force for 1878 consisted of 1 superintendent, 3 lieutenants, 8 inspectors, 8 detective officers, 15 sergeants, and 114 constables, making a total of 176 for an estimated population of 148,000 in 1878.

#### THE DUNDEE PRISON AID SOCIETY.

During 1878 this association was a useful auxiliary in keeping down crime. The aim of this society is the moral and social improvement of discharged prisoners by getting employment for these unfortunate men and women, and thus to put them on the way of leading lawful and honest lives. This society has accomplished much good among criminals, the fallen and the outcast of society.

#### TRAMWAYS IN DUNDEE.

These are about to be further extended and this will be beneficial in providing a considerable amount of work during the coming winter. The company that carry on these tramways has been fairly successful since it started, paying 5 per cent. to the shareholders, hence the reason that they are laying down new lines, which will afford convenient means of transport through the town.

#### VALUATION OF THE BURGH OF DUNDEE.

For the first time in many years, the 1879-'80 ordinary valuation roll of this town shows a decrease, amounting, it is affirmed, to about £10,000. This has arisen from the number of properties unlet—chiefly workingmen's houses—and from the reduction of rents. The valuation of Dundee for the last ten years is seen from the subjoined table:

Years.	Valuation.		Increase.	
	£	s.	£	s.
1860-'70	382,381	16	15,004	19
1870-'71	397,386	15	18,327	01
1871-'72	415,713	16	39,895	13
1872-'73	455,609	09	35,749	14
1873-'74	491,359	03	49,179	03
1874-'75	540,538	06	32,930	04
1875-'76	573,518	10		
1876-'77	607,730	00	34,211	10
1877-'78	637,394	12	29,564	12
1878-'79	680,949	01	23,554	09

#### PARLIAMENTARY LIST OF VOTERS IN DUNDEE.

The total of voters in 1878-'79 was 15,811, and in 1879-'80 14,525, showing a decrease of 1,286. The decrease in the valuation of Dundee, as shown above, amounts to about £10,000, and as this decrease is chiefly upon houses, rented by the working classes, £10,000 will represent 1,000 electors paying an average rental of £10 each. The decrease in the number of electors is shown as 1,286. Therefore, the number of those who have neglected to pay poor assessments—the qualification for being eligible to vote—will not be more than 286. It may be presumed, ac-

cording to this, that 1,000 electors have been compelled through circumstances, likely want of work, to leave the town.

The following statement shows the number of parliamentary electors in Dundee for the past nine years:

1871 .....	16, 274
1872 .....	16, 619
1873 .....	17, 782
1874 .....	19, 599
1875 .....	19, 074
1876 .....	19, 793
1877 .....	18, 964
1878 .....	15, 811
1879 .....	14, 525

#### HEALTH AND SANITARY CONDITION OF DUNDEE.

The medical officer of this town writes me, saying :

I have pleasure in reporting in reply to your inquiry that the health of Dundee has been during the current year (1879) in a very satisfactory condition. Whooping-cough was somewhat prevalent during the first two or three months, but gradually abated after that period. Other zymotic diseases have been in marked abeyance and even the summer diarrhea has been numerically much lower than usual.

In 1878 the health of the town was good. Various circumstances contributed to this. The temperature throughout that year, with the exception of February, November, and December, was higher than usual, while the rainfall was not in excess, but below that of the previous year. With these two favorable atmospheric conditions, the epidemics of 1878 were not at any time of a severe character.

The total deaths during 1878 were 3,159, consisting of 1,517 males and 1,642 females. This indicates a death rate of 21.56 per 1,000 or 1 in 47 individuals, and shows a slight increase over the death rate for 1877. It, however, compares most favorably with the death rate experienced by the principal towns in Scotland, and, with the exception of Greenock, is the lowest recorded for 1878. Of the gross mortality in 1878, 1,414 deaths were children under 5 years of age, 292 were from 5 to 20, 925 from 20 to 60, and 528 above 60. The deaths of children in 1878 under 5 years of age exceeded by 157, those recorded for 1877 and present a death rate of 44.8 per cent. of the total deaths in 1878, as against 41.5 per cent. for 1877. The total births for 1878 were 4,921, viz, 2,533 males and 2,388 females, affording an annual birth rate of 33.56 per 1,000 or 1 in 29 individuals. This shows a decrease of 444 births in comparison with those registered in 1877, a result doubtless due to depopulation and commercial depression throughout the year. In 1878 the natural increase of population through excess of births over deaths amounted to 1,762. Of the births 4,399 were legitimate and 522 illegitimate, showing a rate of 10.56 of illegitimacy in the total births. The following are tables bearing on this subject:

#### *Progress of the population of Dundee from 1821.*

Years.	Population.	Increase in ten years.
1821.....	30, 575	
1831.....	45, 355	14, 780
1841.....	62, 794	17, 439
1851.....	78, 031	16, 137
1861.....	91, 664	12, 733
1871.....	120, 724	29, 060
1879.....	*150, 923	†30, 199

\* Estimated.

† In nine years.

*Natural increase of the population of Dundee during the last ten years.*

Years.	Births.	Deaths.	Natural increase.
1869	4,411	3,562	849
1870	4,354	3,183	1,171
1871	4,552	3,330	1,222
1872	4,643	3,487	1,156
1873	4,952	3,280	1,672
1874	5,103	4,169	934
1875	5,291	3,306	1,985
1876	5,231	4,391	840
1877	5,365	3,027	2,338
1878	4,921	3,159	1,762
Total of ten years	48,823	34,894	13,929

#### SAILORS' HOME.

This much-needed addition to the benevolent institutions of this town was begun last month to be built in Dundee. Several ladies and gentlemen who took an interest in seamen have most generously subscribed £12,000 to erect a substantial and commodious edifice to accommodate seamen. Further, a lady very handsomely arranged for providing an endowment, with a view to the maintenance of the institution. Notwithstanding the depressed state of trade, seldom, if ever, in Dundee, has there been such a pleasant unanimity of generous sentiment, and such timely concurrence of favoring circumstances in bringing about an excellent arrangement. Dundee will thus be supplied with ample provision for the comfort and moral and social well-being of the seamen who land on its quays from foreign ports.

#### FEMALE RESCUE HOME.

This home for the reclamation of those who have fallen from the paths of rectitude and virtue was established in Dundee in 1873, through the exertions of a number of philanthropic ladies. This institution has already done good in rescuing a number of females from vice and degradation, as the number of such women brought before the police court has diminished.

#### A HOME FOR INCURABLES.

This institution was founded this year in Dundee, the funds for which were mainly raised by the efforts of charitable ladies, who displayed great energy in promoting the work.

#### A NEW LUNATIC ASYLUM.

A new asylum has this year been opened in Dundee, the old building having been found inadequate for the requirements of the district, and in many respects unsuitable for the present mode of treatment of patients. The new building is most complete in all its arrangements, and is situated in a beautiful and healthy position.

#### THE CITY OF GLASGOW BANK LIQUIDATION.

This is going on favorably; 13s. 4d. per pound has already been paid on the liabilities. This is wonderful progress to make, almost within a year, with this gigantic winding up. It is expected that the creditors will be paid in full ultimately.

## SCOTCH BANK SHARES.

These have not nearly recovered to what they stood at before the City of Glasgow failure, and it is not believed that they will again touch so abnormally high a figure.

## APPLICATIONS FROM UNITED STATES MANUFACTURERS.

Manufacturers of various kinds of goods in our country have this year continued to apply to me for names of parties likely to become purchasers of American-made articles. To all their inquiries I have deemed it my duty to reply, giving the information desired.

## UNITED STATES COMMERCIAL AND SCIENTIFIC JOURNALS.

These continue to be sent to this office. They are kept on file, and laid before the United States exporters here, with the view of diffusing commercial and scientific knowledge that may be mutually beneficial to both countries. The names of these papers are The American Exporter, The American Mail and Export Journal, The Exporter and Importer, The American Manufacturer and Exporter, The Iron World, The Foreign Mail, The Mechanic, and The Scientific American, which are all valuable in promoting United States business, from the information rendered by their letter-press and advertisements.

MATTHEW McDOUGALL.

UNITED STATES CONSULATE,  
Dundee, October 1, 1879.

*Statement showing the value of declared exports from the consular district of Dundee to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Burlaps .....	\$576, 189 89	\$492, 063 43	\$721, 229 07	\$712, 554 56	\$2, 502, 036 95
Linens .....	396, 990 99	463, 327 01	419, 220 91	641, 810 74	1, 921, 349 65
Yarn .....	25, 152 77	19, 897 32	9, 140 97	10, 428 87	64, 619 93
Flax .....	5, 951 16	3, 621 99	1, 379 39	5, 368 38	16, 320 92
Canvas .....	13, 145 32	3, 270 68	6, 889 62	12, 974 00	36, 279 62
Paper stock .....	44, 574 62	24, 915 83	91, 580 57	49, 882 14	210, 953 16
Black canvas .....	644 65				644 65
Marmalade .....	2, 639 18				2, 639 18
Wearing apparel .....	46 91			97 21	144 12
Sail duck .....	7, 024 97	4, 086 73	6, 496 83	7, 196 91	24, 805 44
Towels .....	5, 261 46	18, 557 95	4, 663 13	15, 549 42	44, 031 96
Bagging .....	8, 475 99	7, 327 32	29, 448 47	22, 363 80	67, 620 58
Jam .....	353 66				353 66
Gange glasses .....	1, 447 27	1, 034 03	1, 957 61	1, 744 57	6, 183 48
Bags .....	7, 372 04	8, 733 46	7, 267 03	4, 477 66	27, 850 19
Sacking .....	140 03				140 03
Shuttles .....	719 02				719 02
Twine .....	4, 216 33				4, 216 33
Books .....		272 44			272 44
Serims .....		2, 774 10	378 51	496 58	3, 649 19
Sack-cutting machine .....		324 59		607 81	932 40
Padding .....		2, 830 46	1, 180 20	6, 643 53	10, 154 19
Jewelry .....		244 01			244 01
Plants .....		149 08			149 08
Flax cloths .....		1, 824 10			1, 824 10
Tarpauling .....		4, 320 68	3, 267 75	607 32	8, 195 75
Second-hand machinery .....		192 73			192 73

*Statement showing the value of declared exports, &c.—Continued.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Carpeting .....		\$1,663 45			\$1,663 45
Coal .....			\$12,724 70		12,724 70
Hemp .....			499 42	\$1,052 97	1,552 39
Combs .....			662 51		662 51
Whisky .....			207 07		207 07
Machinery .....			2,154 32	1,086 97	3,241 29
Seat duck .....				182 48	182 48
Nets .....				229 49	229 49
Counterpanes .....				316 13	316 13
Confections .....				17 82	17 82
Total for 1879 .....	\$1,100,346 26	1,061,531 39	1,320,348 08	1,495,094 16	4,977,319 89
Total for 1878 .....	928,094 92	1,239,729 22	1,142,856 21	1,214,076 01	4,524,756 36
Increase .....	172,251 34		177,491 87	281,018 15	452,563 53
Decrease .....		178,197 83			

## UNITED STATES CONSULAR AGENCY, ABERDEEN.

Polished granite .....	\$22,561 23	\$12,958 85	\$36,596 92	\$19,824 93	\$91,941 93
Paper manufactures .....	3,855 39	3,450 94	2,862 19	1,527 12	11,695 64
Whisky .....	26 43	549 55		123 69	699 67
Tweed manufactures .....		110 00			110 00
Woolen manufactures .....				19,254 06	19,254 06
Linen manufactures .....				11,335 44	11,335 44
Agricultural implements .....				114 19	114 19
Total for 1879 .....	26,443 05	17,069 34	39,459 11	52,179 43	135,150 93
Total for 1878 .....	31,089 34	26,013 32	34,237 04	25,464 41	116,804 11
Increase .....			5,222 07	26,715 02	18,346 82
Decrease .....	4,646 29	8,943 98			

## ABSTRACT.

Total at Dundee for 1879 .....	\$1,100,346 26	\$1,061,531 39	\$1,320,348 08	\$1,495,094 16	\$4,977,319 89
Total at Aberdeen for 1879 .....	26,443 05	17,069 34	39,459 11	52,179 43	135,150 93
Total from this district for 1879 .....	1,126,789 31	1,078,600 73	1,359,807 19	1,547,273 59	5,112,470 82
Total from this district for 1878 .....	959,184 26	1,265,742 54	1,177,093 25	1,239,540 42	4,641,560 47
Increase .....	167,605 05		182,713 94	307,733 17	470,910 35
Decrease .....		187,141 81			

## DUNFERMLINE.

*Statement showing the value of declared exports from the commercial agency of Dunfermline to the United States during the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Linens .....	\$158,095 69	\$262,241 78	\$95,932 72	\$315,087 48	\$831,307 67
Linens and cottons .....	124,345 48	175,015 64	49,069 59	48,573 15	397,008 86
Cottons .....	22,982 72	26,864 83	28,542 50	99,391 16	177,781 01
Floor oil-cloths .....	13,357 57	6,165 70	6,530 06	10,894 45	36,947 78
Total in United States gold .....	318,781 46	470,287 75	180,074 87	473,901 24	1,443,045 32
Total for the year 1878 .....	214,139 83	368,077 58	147,280 10	369,505 37	1,099,002 88
Increase .....	104,641 63	102,210 17	32,794 77	104,395 87	344,042 44

H. RAY MYERS.

## GLASGOW.

*Report, by Consul Cooper, on the trade and industries of the consular district of Glasgow for the years 1878 and 1879.*

I have the honor to submit herewith my annual statement, A, of exports from the port of Glasgow to the United States for the year ending September 30, 1879; also, a statement, B, of the principal imports to this port from the United States during the same period; also, a report, C, of the navigation of this port for the year ending September 30, 1879; also, a statement, D, of the ship-building on the Clyde for the year 1878.

## INCREASED EXPORTS TO THE UNITED STATES.

There is an increase of \$1,049,345 in the value of exports to the United States, largely due to the increased demand for pig-iron. The shipments of that article fell in value from \$2,402,186 in 1872 to \$181,364 in 1878, the price declining in that period from \$36 per ton to \$10 per ton. The shipments of the last quarter of the present fiscal year largely exceed in value those of the three preceding quarters, and are about twice the value of the entire shipments of the year ending September 30, 1878. This increased activity in the iron trade has given a brighter tone to other industrial enterprises of this district, and the increase of exports of every description of manufacture is quite obvious.

## DULLNESS OF TRADE IN GENERAL.

Other evidences of any decided improvement in general trade are wanting. The outlook from a business point of view is even more gloomy than at the beginning of the year. At that time a sudden shock to the credit and confidence of the business community throughout Scotland was experienced in the failure of the City of Glasgow Bank—the greatest commercial catastrophe and disgrace of the last fifty years. On the 2d day of October, 1878, this establishment, of excellent standing in popular belief, and possessing an unusually large constituency, having many years since become practically insolvent by reckless loans upon valueless securities, and kept afloat solely by the renewal and enlargement of its own acceptances, suddenly closed its doors with liabilities amounting to nearly \$64,000,000, with an estimated deficiency of \$34,000,000, although it had a few weeks previously declared a dividend of 12 per cent. with a large showing of surplus. There were 1,250 stockholders and 450 gratuitous trustees under marriage settlements, all of whom are liable to the last shilling of their fortune, which simply means financial ruin to them all. There were 59,000 depositors, who have \$45,000,000 locked up indefinitely, but who will, it is expected, realize in full eventually. The paid-up stock of the bank was \$5,000,000, and was quoted at 240, therefore the actual loss to the unfortunate stockholders alone, including the deficiency of \$34,000,000, was \$46,000,000, while the resultant shrinkage in the value of stocks and shares of every description involves an additional loss to the community in general, even exceeding that amount. It is proper to add that subsequent investigations of the affairs of the other banks of Scotland reveal the fact that they are all conducted in a safe and conservative manner and upon an eminently sound basis.

## THE CRY FOR WORK AND BREAD.

To the general depression in business is added the fact that the present season in Scotland has been unprecedentedly cold and wet, resulting in an almost total failure in the crops of all kinds and the ruin of a vast number of the best farmers of Scotland, and it is conceded that actual famine would be inevitable, except for the unlimited stores of cheap breadstuffs and other food constantly coming in from the United States. The ever-increasing number of the unemployed is a matter of very grave concern, and is at present demanding the most serious attention and consideration of the authorities here. It is estimated that there are now about 35,000 able-bodied persons out of employ in this city, and the number daily increasing. The clamorous demands for work and for bread, individually upon the streets and collectively upon the public squares, indicate serious consequences if not promptly met. This state of things is aggravated by the increasing antagonism of the employed toward the employer. In spite of the sad scarcity of employment, labor strikes are constantly recurring, incited by leaders either crafty or ignorant, resulting in incalculable injury to both sides, and contributing largely to the prevalent misery and distress.

## SHIP-BUILDING ON THE CLYDE.

There is still no improvement in that important industry of the Clyde—ship-building. The tonnage launched in 1878 was 211,989, including 11 iron steamers of 2,000 tons and upward each, and 12 of 3,000 tons and upward. But this prosperity of last year was temporary. At the close of the year the amount of tonnage constructing and contracted for was only 82,784, the lowest for a period of eleven years. The entire number of vessels on the stocks in all the yards on June 30, 1879, was only 55. It is perhaps worthy of note that there was launched yesterday, at Dumbarton, the Buenos Ayrean *steel* screw steamer, the largest in the world, built for the transatlantic service. Gross tonnage, 4,040 tons.

## SUGAR IMPORTS.

The sugar trade of the Clyde has advanced from 56,000 tons imported in 1858 to 250,000 tons in 1878, and the entire amount of these importations have been absorbed by the 14 refineries at Greenock. This trade has felt the effects of the general depression less, perhaps, than any of the other important industries of the district; yet several refineries have suspended operations for the present. Not a pound of loaf sugar is now made in Scotland, the trade being entirely extinguished by importations chiefly from France and other Continental nations granting bounties upon their exports. The price of good brown sugar has fallen from \$10.50 per cwt. in 1858 to \$5.50 in 1878. The imports of beet-root sugar have increased from 22,000 tons in 1858 to 48,000 tons in 1878. All sugars are imported free of duty.

## GENERAL EXPORTS.

Besides pig iron, there is a marked increase over last year in the shipments of chemicals, thread, cotton, linen and woollen goods, caps, wines and liquors (mostly whisky), and scrap iron (old rails), and a falling off in muslins, carpets, machinery, and ironware.

## IMPORTS FROM THE UNITED STATES.

While it is certain that there is a considerable market in Scotland for many lines of American manufactures, the present state of trade is very unfavorable to an active demand for anything but the actual necessities



of life. Many articles which, as novelties, met a good demand when first introduced, have been promptly imitated by enterprising manufacturers on this side, who have effectually closed this market to our goods in that line, especially as to articles of comparatively small value in household ironmongery.

The shipments of breadstuffs and provisions have largely increased during the past year.

It is a significant fact that of the 11,000,000 pounds of beef which came from the United States during the past year, scarcely a pound of American beef is retailed *under that name* in this market. It is of such superior quality that it is nearly all sold as the genuine home-fed article.

American, bacon, butter, and cheese now shipped to this port are most excellent in quality, and nearly monopolize the market here.

#### ABSENCE OF AMERICAN SHIPPING.

It is greatly to be regretted that the immense shipments from the United States to this country are made almost exclusively in foreign bottoms. Freights have advanced here to a remunerative point, yet our flag is seldom seen in the Clyde, and there is no reason to hope for improvement in that respect till existing restrictions shall be so modified as to give American citizens a fair chance to compete with those who are permitted to purchase their ships in an open market.

SAMUEL F. COOPER.

UNITED STATES CONSULATE,  
Glasgow, October 10, 1879.

A.—Statement showing the value of declared exports from the consular district of Glasgow to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Thread.....	\$445,394 00	\$456,512 00	\$476,295 00	\$578,852 00	\$1,957,051 00
Cotton and linen goods and cotton.....	121,062 00	250,375 00	115,992 00	125,307 00	612,736 00
Woolen goods and wool.....	3,756 00	2,105 00	18,247 00	6,531 00	30,639 00
Muslins.....	11,896 00	90,562 00	43,655 00	77,753 00	223,806 00
Laces and trimmings.....	7,001 00	19,385 00	17,320 00	31,357 00	75,063 00
Carpets.....	20,736 00	1,710 00	4,961 00	15,028 00	42,435 00
Hats and caps.....	6,597 00	8,876 00	5,791 00	28,917 00	50,181 00
Furs and skins.....	18,630 00	18,037 00	11,617 00	1,430 00	49,714 00
Fishing gut.....	3,457 00	3,958 00	292 00	.....	7,707 00
Hemp and jute goods.....	4,294 00	8,843 00	715 00	4,704 00	18,556 00
Books.....	2,491 00	2,278 00	3,195 00	1,438 00	9,402 00
Pig-iron.....	64,897 00	83,958 00	125,220 00	354,784 00	628,859 00
Machinery and ironware.....	15,254 00	12,471 00	13,830 00	4,188 00	45,743 00
Wire goods.....	1,500 00	4,257 00	3,627 00	1,211 00	10,595 00
Gum and paints.....	6,116 00	7,435 00	9,090 00	12,731 00	35,372 00
Coals.....	3,500 00	6,410 00	2,081 00	1,591 00	13,582 00
Paper and paper stock.....	19,625 00	11,278 00	11,560 00	18,705 00	61,168 00
Granite and stone goods.....	5,134 00	2,745 00	3,511 00	6,714 00	18,104 00
Tobacco pipes (clay).....	4,862 00	6,727 00	4,506 00	4,214 00	20,309 00
Wine and liquors.....	30,940 00	16,832 00	9,565 00	32,420 00	89,757 00
Beer.....	5,271 00	5,125 00	7,361 00	2,513 00	20,270 00
Scrap iron and steel.....	.....	.....	.....	98,234 00	98,234 00
Oatmeal and flour.....	.....	.....	.....	.....	.....
Fire-clay goods.....	117 00	401 00	2,590 00	1,270 00	4,378 00
Chemicals.....	107,947 00	122,475 00	243,447 00	225,545 00	699,414 00
Shawls.....	23,035 00	38,127 00	37,057 00	40,535 00	139,654 00
Earthenware and glass.....	9,667 00	6,843 00	17,056 00	8,341 00	41,907 00
Miscellaneous.....	175,796 00	3,058 00	15,005 00	99,788 00	298,647 00
Total in United States gold.....	1,119,875 00	1,190,783 00	1,203,586 00	1,784,101 00	5,298,345 00
Total for preceding year.....	1,161,861 00	1,139,680 00	950,770 00	996,689 00	4,249,000 00
Increase.....	.....	51,103 00	252,816 00	787,412 00	1,049,345 00
Decrease.....	41,986 00	.....	.....	.....	.....

**B.—Statement showing the principal imports from the United States to the city of Glasgow for the year ending September 30, 1879.**

Articles.	Quantity.	Articles.	Quantity.
Dead meat:		Salt pork.....cwt.	17, 160
Beef.....pounds.	11, 251, 525	Hams.....do.	69, 208
Mutton.....do.	787, 067	Leather.....do.	2, 739
Pork.....do.	50, 616	Tallow.....do.	31, 552
Live cattle.....head	2, 885	Rosin.....do.	148, 243
Live sheep.....do.	6, 468	Shoepegs.....do.	8, 200
Wheat.....bush	2, 216, 969	Tobacco.....do.	32, 304
Indian corn.....do.	2, 419, 106	Oil-cake.....do.	11, 140
Flour.....cwt.	1, 788, 916	Do.....bags.	17, 143
Oat-meal.....do.	242, 190	Canned meat.....cases.	80, 541
Butter.....do.	55, 872	Apples.....barrels	56, 899
Cheese.....do.	150, 533	Staves.....pieces.	478, 258
Lard.....do.	38, 282	Lumber.....do.	45, 585
Bacon.....cwt.	410, 443		

**C.—Returns of arrivals of sailing vessels at the harbor of Glasgow for the year ending June 30, 1879.**

	1879.		1878.	
	No.	Tonnage.	No.	Tonnage.
Coastwise.....	1, 896	252, 883	2, 342	299, 372
Foreign.....	307	140, 790	385	158, 254
Total.....	2, 203	398, 173	2, 727	457, 626

*Countries to which the above vessels belonged.*

Countries.	No.	Tonnage.	Countries.	No.	Tonnage.
Britain and dependencies.....	194	101, 346	Spain.....	1	811
Norway and Sweden.....	34	13, 437	Italy.....	16	7, 308
Russia.....	1	687	Austria.....	5	2, 413
Germany.....	5	1, 463	Greece.....	1	321
Denmark.....	3	661	Brazil.....	1	434
Holland.....	4	764	United States.....	14	8, 044
France.....	28	3, 571			

**D.—Return of arrivals of steam vessels at the harbor of Glasgow for the year ending June 30, 1879.**

Countries, &c.	1878.		1879.	
	No.	Tonnage.	No.	Tonnage.
Scotland.....	9, 470	552, 951	10, 185	582, 183
England.....	722	352, 177	795	860, 127
Ireland.....	2, 036	586, 604	2, 012	590, 091
United States.....	122	230, 455	134	258, 615
Foreign.....	498	261, 980	470	261, 757
Steamers built and put back from sea.....	362	170, 566	456	231, 103
Total.....	13, 210	2, 154, 738	14, 052	2, 283, 876

**D.—Statement showing the number and register tonnage of new vessels launched upon the River Clyde during the year 1878.**

New vessels.	No.	Tons.	No.	Tons.
Iron steamers:				
Under 100 tons each.....	10	474		
From 100 to 500 tons each.....	43	13, 412		
From 500 to 1,000 tons each.....	24	17, 297		
From 1,000 to 2,000 tons each.....	30	45, 322		
From 2,000 to 3,000 tons each.....	11	26, 680		
3,000 tons and upwards.....	12	31, 314		
			130	184, 499

D.—Statement showing the number and register tonnage, &c.—Continued.

New vessels.	No.	Tons.	No.	Tons.
Iron sailing ships:				
Under 500 tons each .....	7	2,755		
From 500 to 1,000 tons each .....	12	9,884		
From 1,000 to 2,000 tons each .....	28	41,402	47	54,041
Composite steamers:				
Under 500 tons .....	1	250		
From 500 to 2,000 tons each .....	3	1,968		
Wooden screw steamer for Ceylon .....			4	2,316
Steel sailing ship .....			1	180
Steel paddle schooners .....			1	1,700
Steel steamers .....			2	1,636
Steel and iron ships .....			2	208
Barges, &c. ....			2	4,754
Iron screw steam-corvettes for the British Government, each 2,377 tons and 450 nominal horse-power .....			20	872
			5	11,885
			214	211,989

### LEITH.

*Report, by Consul Robeson, on the trade and commerce of Leith, for the year ending June 30, 1879.*

I have the honor to transmit herewith, in compliance with the Consular Regulations, the following annual returns applicable to the commerce falling under this consular district.

*Inclosure A.*—Statement of the imports at Leith for the year ending June 30, 1879, showing the average value of the various kinds of produce imported at Leith from the countries mentioned in it. The total value of the whole imports amounts to \$13,641,594.01, being a decrease on last year by over \$6,000,000.

*Inclosure B.*—Statement of the exports at Leith for the year ending June 30, 1879, showing the total value of these to be \$1,974,548.04. This is a decrease upon last year of nearly half a million dollars; and as compared with the total for 1877 it is a decrease of nearly a million dollars. This result arises from the continued depression of trade in those products which consist chiefly of coal and pig-iron. Within the last few weeks, however, large orders for pig-iron have been received in this country, and the market value of the article has risen over \$2 per ton.

*Inclosure C.*—Statement showing the navigation at the port of Leith for the year ending August 31, 1879. From this statement it will be seen that during the year there entered the port of Leith 1,453 vessels of the total burden of 520,336 tons, and during the same period there cleared 945 vessels of the total burden of 384,380 tons. Of the vessels which entered 5 were of the United States flag, of the burden of 2,321 tons, and there cleared 4 of the burden of 2,192 tons, showing a considerable decrease as compared with the previous year.

*Inclosure D.*—Statement of the declared exports from this consulate district to the United States during the year ending September 30, 1879. This statement shows the total value of the exports for that year to be \$368,939.12. This amount is considerably less than last year, the decrease being caused by the establishment of the consular agency at Kirkcaldy, Fifeshire, which was previously under the jurisdiction of this consulate.

There are large imports to this district by way of Glasgow and Liverpool from the United States, and the district is well canvassed by

American agents, who appear to know the wants of their different trades well, and do a fair business. The imports of beef from the United States to this district have been very large, but have not materially affected the home trade. The shipments of butter from the United States have had a considerable influence upon the trade in that produce from Germany, Denmark, Sweden, and Ireland, owing to the quality having greatly improved, and the price being much cheaper.

#### TRADE WITH THE UNITED STATES.

With regard to the trade in United States cheese, a very fair business has been done this year, as the quality continues to improve so much, and prices, until quite recently, were so unusually moderate that the Scotch farmers were quite paralyzed, being unable to produce a quality of cheese to compete. The result has been that several large producers in the agricultural districts, where cheese-making has been carried on for a great many years, have had to give up the trade altogether. Dutch cheese, which used to be such a large import here, has also received a material check. The price of the finest American factory and dairy cheese has for some time been \$7 per cwt., but it has recently rapidly risen, and the market price is now \$10.50 per cwt., with the prospect for a further rise.

A good trade is also being done here in American canned products, including meats, vegetables, and fruits. The manufacturers in the United States make numerous trade inquiries at this consulate, which I endeavor to answer promptly and as fully as possible.

#### AGRICULTURE.

Although we have now arrived at the 1st of October, no Scotch wheat of the present season's crop has been offered for sale; the agricultural situation is gloomy to a degree, the fields still being quite green in the uplands, and the season is too far advanced for any hope of summer sunshine to repair the mischief. The frost also has appeared, and the chances of the grain maturing properly are reduced to a minimum. In short, bad as the harvests have been since 1876, it must be admitted that the present season's yield will be far the worst, and grievously detrimental to the prosperity of the agricultural community. The reserve of 1879 wheat still remaining in farmers' hands is necessarily very limited. Barley and oats are correspondingly bad, but no estimate of how much they will fall below the average yield can yet be given. Turnips are likely to turn out better than was expected, but still they will fall short of the average by from 10 to 20 per cent., which means an enormous loss to Scotch farmers. Potatoes promised well until disease set in a few weeks ago, and now it is feared the loss among them will be very disastrous. Pasture is scarce, and stock are not doing well, and they are cheaper than they have been for many years. Altogether this is likely to be one of the worst years Scotch farmers have ever seen.

#### REDUCTION OF WAGES.

I anticipate that the coming winter will be a hard one on the working classes, as there is a tendency to reduce the wages of all classes of workmen throughout Scotland. There is at present a proposition before the directors of the North British Railway Company (one of the largest corporations of the kind in Scotland) to reduce the wages 10 per cent. from the directors down to the laborer. This reduction, if given effect to, will result in a saving to the company of over \$250,000; but I may mention that this will be resisted by a majority of the officials and workmen. Throughout Scotland there is a strong tendency to strict economy in carrying on all kinds of business, and in the manner of living.

## EMIGRATION.

I anticipate, as another result of the depressed state of trade and agriculture in Scotland, that there will, in the beginning of 1880, be a greatly increased number of emigrants to the United States, and these will be of a better class and carrying more money with them than hitherto.

JOHN T. ROBESON.

UNITED STATES CONSULATE,  
*Leith, October 3, 1879.*

*A.—Statement showing the imports at Leith, Scotland, for the year ending June 30, 1879.*

Articles.	Quantity.	Value entered.	Total value.	Whence imported.
Wheat . . . . . bushels.	1, 107, 928	\$1, 661, 892 00	\$2, 086, 623 60	United States of America.
Oats and maize . . . . . do.	449, 976	382, 479 60		
Pease . . . . . do.	16, 552	16, 552 00		
Wood . . . . . loads.	1, 285	25, 760 00		
Guano . . . . . tons.	4, 100	239, 431 80	239, 431 80	South America.
Do . . . . . do.	2, 549	148, 856 50	148, 856 50	
Wheat . . . . . bushels.	110, 328	165, 492 00	656, 064 80	Canada.
Oats and maize . . . . . do.	182, 608	155, 216 80		
Pease . . . . . do.	79, 536	79, 536 00		
Wood . . . . . loads.	12, 791	255, 820 00		
Wheat . . . . . bushels.	19, 680	29, 520 00	1, 239, 174 91	Denmark.
Barley . . . . . do.	291, 544	291, 544 00		
Oats and maize . . . . . do.	188, 240	160, 004 00		
Rye . . . . . do.	14, 664	16, 130 40		
Flour . . . . . bags.	64, 769	740, 716 09	302, 989 56	France.
Tow . . . . . tons.	7	1, 260 42		
Pease . . . . . bushels.	15, 488	15, 488 00		
Beans . . . . . do.	14, 080	16, 192 00		
Flour . . . . . bags.	23, 647	270, 433 59	4, 244, 386 99	Germany.
Flax . . . . . tons.	4	875 97		
Wheat . . . . . bushels.	1, 440, 848	2, 161, 272 00		
Barley . . . . . do.	876, 760	876, 760 00		
Pease . . . . . do.	145, 944	145, 944 00	2, 352 00	Holland.
Beans . . . . . do.	48, 456	55, 724 40		
Tares . . . . . do.	14, 896	25, 823 20		
Flour . . . . . bags.	37, 166	425, 040 59		
Wood . . . . . loads.	1, 655	33, 100 00	861, 028 59	Hamburg.
Flax . . . . . tons.	828	181, 325 79		
Tow . . . . . do.	116	20, 887 01		
Hemp . . . . . do.	2, 185	319, 010 00		
Pease . . . . . bushels.	2, 352	2, 352 00	42, 768 00	Norway.
Wheat . . . . . do.	48, 024	72, 036 00		
Barley . . . . . do.	27, 640	27, 640 00		
Oats and maize . . . . . do.	1, 728	1, 468 80		
Pease . . . . . do.	1, 152	1, 152 00	2, 830, 152 86	Russia.
Peasns . . . . . do.	24, 872	28, 602 80		
Tares . . . . . do.	752	1, 278 40		
Flour . . . . . bags.	63, 637	727, 770 23		
Tow . . . . . tons.	6	1, 080 36	354, 904 80	Sweden.
Wheat . . . . . bushels.	28, 512	42, 768 00		
Oats and maize . . . . . do.	3, 488	2, 964 80		
Wood . . . . . loads.	17, 597	351, 940 00		
Wheat . . . . . bushels.	425, 624	638, 436 00	421, 069 20	Turkey.
Barley . . . . . do.	367, 720	367, 720 00		
Oats and maize . . . . . do.	120, 368	102, 312 80		
Pease . . . . . do.	26, 000	96, 000 00		
Tares . . . . . do.	2, 928	4, 977 60	202, 190 40	
Flour . . . . . bags.	360	4, 117 05		
Wood . . . . . loads.	26, 069	521, 380 00		
Flax . . . . . tons.	3, 570	781, 808 22		
Tow . . . . . do.	466	83, 908 19	421, 069 20	
Hemp . . . . . do.	2, 113	308, 498 00		
Barley . . . . . bushels.	11, 344	11, 344 00		
Oats and maize . . . . . do.	91, 736	77, 975 60		
Beans . . . . . do.	17, 904	20, 589 60	202, 190 40	
Wood . . . . . loads.	15, 588	311, 760 00		
Barley . . . . . bushels.	169, 824	169, 824 00		
Rye . . . . . do.	29, 424	32, 366 40		
Total value of imports . . . . .			13, 641, 594 01	

*Résumé—Total of each article.*

Articles.	Year ending June 30, 1879.	Year ending June 30, 1878.	Decrease.
Wheat.....bushels..	3,180,944	4,663,642	1,482,698
Barley.....do.....	1,744,832	2,957,944	1,213,112
Oats and maize.....do.....	1,038,144	2,844,496	1,806,352
Pease.....do.....	287,024	322,864	35,840
Beans.....do.....	105,312	328,032	222,720
Tares.....do.....	18,576	68,680	50,104
Rye.....do.....	44,088	171,884	127,796
Flour.....bags.....	189,579	399,232	209,653
Meal.....do.....		10	10
Wood.....loads.....	74,985	110,332	35,347
Guano.....tons.....	7,361	11,595	4,234
Flax.....do.....	4,402	3,816	1,414
Tow.....do.....	565	1,115	520
Hemp.....do.....	4,298	8,674	4,376

*B.—Statement showing the exports from Scotland, for the year ending June 30, 1879.*

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Tons.</i>		
Coals.....	10,697	\$37,439 50	
Pig iron.....	50	523 15	\$37,962 65
Coals.....	10,219		South America.
Do.....	701	2,453 50	British North America.
Pig iron.....	463	4,844 25	Austria.
Coals.....	4,390	15,365 00	
Pig iron.....	6,060	63,400 62	Belgium.
Coals.....	11,011	38,538 50	
Pig iron.....	4,763	49,833 00	Denmark.
Malleable iron.....	56	1,771 40	
Coals.....	879		3,076 50
Do.....	11,723	41,036 50	Egypt.
Pig iron.....	4,218	44,182 83	85,701 08
Malleable iron.....	17	537 75	France.
Coals.....	19,375	67,812 50	
Pig iron.....	19,483	203,850 14	271,662 64
Coals.....	81	318 50	Germany.
Pig iron.....	45,509	476,159 52	476,478 02
Coals.....	6,835	23,922 50	Hamburg.
Pig iron.....	33,027	345,560 67	369,483 17
Coals.....	12,331	43,158 50	Holland.
Pig iron.....	1,644	17,201 13	60,359 63
Coals.....	12,839	44,936 50	Italy.
Pig iron.....	220	2,301 85	47,238 35
Coals.....	967		3,384 50
Do.....	39,609	136,631 50	Portugal.
Pig iron.....	20,412	213,570 24	364,285 26
Malleable iron.....	382	12,083 52	Russia.
Coals.....	1,001	3,503 50	
Pig iron.....	200	2,092 59	5,596 09
Coals.....	6,210	21,735 00	23,775 28
Pig iron.....	195	2,040 28	Sweden.
Coals.....	381		1,333 50
Do.....	3,491		12,218 50
			Turkey.
			West Indies.
Total value of exports.....		1,974,528 04	

## RECAPITULATION.

Years.	Coals.	Pig iron.	Malleable iron.
	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
Year to June 30, 1879.....	152,752	136,244	455
Year to June 30, 1878.....	290,369	118,161	1,095
Increase.....		18,083	
Decrease.....	137,619		640

C.—Statement showing the navigation at the port of Leith for the year ended August 31, 1879.

Flag.	From or to	ENTERED.				CLEARED.					
		Steamers.		Sailing vessels.		Steamers.		Sailing vessels.			
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.		
British.	Russia, northern ports.	26	19,792	13	2,082	39	21,874	5	1,241	45	31,398
	German Confederation	246	120,868	32	3,510	278	124,384	7	871	214	104,895
	Holland	61	23,631	12	1,787	73	25,418	1	89	57	21,827
	Belgium	72	21,249	9	1,097	81	22,346	3	370	72	21,104
	France	71	24,891	6	591	77	25,482	3	562	57	21,298
	Spain	37	24,160	22	12,448	59	36,617	3	877	5	1,828
	Portugal	8	2,023	10	2,188	18	4,211	2	252	4	458
	Italy	1	341	4	1,972	5	2,313	2	296	8	5,250
	Turkey	3	2,050	3	1,774	6	2,824	4	2,410	1	1,170
	United States of America	2	2,162	9	4,463	11	6,645	2	647	2	446
	Mexico.			1	1,178	3	3,577	1	446	1	446
	Pern.			3	3,577	2	1,517	2	2,222	2	2,222
	Russia, southern ports	2	1,517			47	25,036	48	25,603	49	25,874
	Sweden									2	415
	Denmark	47	25,036							1	188
	Norway					3	2,204	2	1,417	1	188
	Brazil									2	752
	Austria	3	2,204			35	15,993	10	9,240	3	1,547
	Greece	3	2,391	32	13,692	15	11,429	2	1,572	2	1,572
	All other countries.					1	131	1	125	6	2,169
British Possessions:	3	2,366	12	9,093	19	4,853	5	3,401	9	2,364	
North American colonies			1	131	1	826			14	5,765	
East Indies.											
Australia.											
All other ports											
Russia, northern ports.	1	444	18	4,409	1	826					
United States of America			1	826							
Portugal											
Italy											
Denmark											
All other countries.											
Sweden	1	323	13	2,356	13	2,356	1	392	8	1,755	
Russia, northern ports			3	479	4	802			3	512	
Spain			2	1,096	2	1,096					
Mexico			1	312	1	312					
German Confederation	4	1,613	2	396	6	2,009			2	178	
Belgium.			1	594	1	594					
Denmark.			1	83	1	83					
Russia.											
Swedish.											

Norway	1	401	2	863	1	401	1	323	1	312	2	625	
Italy								294			1	294	
All other countries													
British possessions:													
All other ports													
Russia, northern ports													
Sweden	1	397	32	6,467	32	6,467			1	512	1	512	
Norway	1	164	21	3,969	21	3,969			6	1,644	6	1,644	
German Confederation			72	10,787	72	10,787	2	603	33	475	1	475	
Belgium			3	539	3	539			5	5,705	35	6,308	
United States of America			1	163	1	163				5	926	5	926
Spain			18	8,605	18	8,605							
Peru			4	1,798	4	1,798			1	565	1	565	
Denmark			1	1,211	1	1,211			1	324	1	324	
Mexico									5	1,211	1	1,211	
Portugal									2	1,118	5	1,118	
All other countries									2	918	2	918	
British possessions:									1	190	1	190	
North American colonies									1	440	1	440	
All other ports													
Russia, northern ports													
Norway	2	721	4	1,767	4	1,767			1	360	1	360	
Denmark			15	1,412	15	1,412			4	381	4	381	
Belgium	37	16,441	96	5,834	96	5,834							
Sweden			10	1,149	10	1,149			27	3,251	64	19,963	
German Confederation	1	249	23	3,222	23	3,222	37	16,712					
Holland			13	1,350	13	1,350			6	786	6	786	
France			4	433	4	433							
Italy			1	136	1	136							
Russia, Northern ports			27	4,198	27	4,198			1	161	1	161	
German Confederation	19	7,943	77	9,858	77	9,858	3	2,430	9	1,505	12	3,935	
Sweden			9	1,421	9	1,421	4	1,464	78	11,077	82	12,561	
Norway			3	281	3	281							
Portugal			2	291	2	291							
Belgium			4	433	4	433							
Peru			1	561	1	561							
Holland			2	382	2	382							
Russia, southern ports													
Chili	1	832											
Turkey													
United States of America	1	616											
All other countries													
Sweden			2	746	2	746			1	601	1	601	
Holland			2	287	2	287			1	363	1	363	
Russia, northern ports	75	41,820	183	598	183	598			2	678	2	678	
Belgium			1	69	1	69	74	41,551	1	252	75	41,803	
Denmark	4	2,117	2	183	2	183			2	182	2	182	
France			2	140	2	140	2	1,123	1	73	1	73	
German Confederation			1	73	1	73							
France			2	131	2	131			9	758	9	758	
Peru			2	218	2	218			2	490	2	490	
German Confederation			1	416	1	416			1	143	1	143	





D.—Statement showing the value of declared exports from the consular district of Leith to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Alas	\$11,919 58	\$15,542 34	\$11,950 76	\$7,638 29	\$47,059 97
Biscuits	2,208 89	1,210 31	1,453 70	3,068 97	7,941 87
Books	38,037 26	40,208 42	38,025 49	21,679 87	137,951 04
Coals	605 24	627 20	16,379 15	14,230 76	31,742 11
Colors	540 48	837 18	1,042 80	721 65	3,142 35
Gelatine	14,036 80	25,333 42	20,146 33	19,979 41	79,495 96
Granite			1,386 95		1,308 95
Grindstones		195 57		109 56	305 13
Linens	1,601 62		1,395 93	488 59	3,486 14
Lime juice				307 80	307 80
Lithographic stones	1,193 47				1,193 47
Maps	2,215 97	561 72	2,367 52	3,167 62	8,312 83
Miscellaneous	194 66	492 31	954 26	4,396 17	6,087 40
Morphia	1,029 32	2,636 38	1,626 97	2,960 16	8,252 83
Oatmeal	590 87	728 72	447 06	412 98	2,179 63
Paper shavings	5,501 79	2,750 53	3,534 41	274 03	12,061 36
Pictures and drawings		2,433 25			2,433 25
Printing materials	472 29	603 30	3,130 67	1,899 96	6,106 22
Seeds	209 18		205 72	80 54	495 44
Stationery	967 94				967 94
Stereo-plates	748 94			203 29	952 23
Tweeds				448 00	448 07
Wax			106 87		106 84
Whisky	728 80		271 91	167 85	1,168 56
Wines	431 21		666 36	438 11	1,470 68
China and glass	289 65			180 86	470 51
Guns	614 95				614 95
Sailcloth	1,777 50				1,777 50
Fishing material			122 99		122 99
Medicines and glycerine			946 42		946 42
Total in United States gold	85,916 41	94,060 65	106,111 27	82,850 79	368,939 12
Total for preceding year	138,464 39	157,986 78	98,218 95	222,139 97	611,810 09
Increase			7,892 32		
Decrease	47,547 98	63,926 13		139,289 18	242,870 97

## WALES.

## CARDIFF.

*Report, by Consul Sikes, on the trade and transactions of Cardiff, for the year ending September 30, 1879.*

I have the honor herewith to send my annual report on the trade and navigation of Cardiff and district, together with Form D.

The principal exports are steam and house coal, iron and steel rails, tin plates, and spiegeleisen. The price of steam and house coal has remained about the same since my last report. The coal proprietors are keeping their collieries working in hopes of better times more than for any advantage they derive from the price realized, which, in many cases, barely covers the cost of working the coal.

The last month, I am glad to report, has been an exceptionally busy one in the iron trade, and numerous orders have been received from the United States for railway iron, the first for a number of years. It is hoped, with the revival of trade in the United States, that the future here may soon become brighter. Several iron works in this district

have commenced work, and it is believed important orders have been received.

The tin-plate trade has also shown a marked increase, but there is much dissatisfaction between masters and workmen concerning the terms of working. The differences which are constantly arising between masters and men, as to wages and hours of labor, tend to drive the trade into other channels, and it frequently happens that until the men are compelled to succumb by sheer want they hold out, and then accept gratefully, but too late, the masters' terms when the orders have been given elsewhere.

In the live-meat trade there has been some activity. During the year the Cardiff and New York steamers have landed at Cardiff the following live animals, viz: 537 hogs, out of a total of 857 shipped; 117 sheep, out of a total of 332 shipped; 391 oxen, out of a total of 394 shipped, and 4 horses. The loss of live stock arose principally through the bad weather, but the freighters have a satisfactory arrangement with the underwriters in cases of total loss.

There are now three steamers running regularly between Cardiff, Swansea, and New York.

W. WIRT SIKES.

UNITED STATES CONSULATE,  
Cardiff, September 30, 1879.

*Statement showing the value of declared exports from the consular district of Cardiff to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Tin plates.....	\$38,208 56	\$51,287 01	\$21,356 82	\$67,552 51	\$178,405 80
Spiegeleisen.....	37,242 24	11,724 75	27,054 64	137,347 67	213,369 30
Steam coal.....	1,335 26	1,854 11	17,113 15	346 26	20,648 78
Arsenic.....	740 08			727 36	1,467 44
Medicine.....	146 51				146 51
Bricks and cement.....	301 64	1,113 90	1,410 35	332 36	3,158 25
Soft homo rods.....	13,113 86	18,816 54	20,480 64	22,270 28	74,681 32
Drawn wire.....	449 67				449 67
Nails.....	286 80				286 80
Rottenstone.....		143 11	466 78	2,218 54	2,828 43
Oxalic acid.....		1,467 56			1,467 56
Patent coke.....		6,117 26			6,117 26
Black taggers.....		1,571 58	338 25	1,045 87	2,955 70
Indigo auxiliary.....			292 76	172 33	465 09
Rail crops.....			2,530 05	5,063 73	7,593 78
Steel shoes and dies.....			5,540 50	24 35	5,564 85
Tin, taggers'.....				781 73	781 73
Books.....				962 28	962 28
Railway iron.....				85,330 54	85,330 54
Best puddled bars.....				560 48	560 48
Total in United States gold.....	91,914 62	94,096 72	96,583 94	824,736 29	607,331 57
Total for preceding year.....	68,095 71	78,139 84	66,203 11	84,465 58	296,903 74
Increase.....	23,818 91	15,957 88	30,380 83	240,270 71	310,427 83
Decrease.....					

## FRANCE.

*Report, by Consul-General Fairchild, of Paris, on the commerce, navigation, industries, and finances of France for the years 1878 and 1879.*

I have the honor to submit herewith the report from this consulate-general upon commerce, navigation, and other matters of national interest for the year 1878.

The general foreign commerce of France during 1878 amounted to a total of \$1,840,111,063.40, being an increase, as compared with 1877, of \$51,972,245.\*

A comparison of exports and imports separately during these two years shows that, in 1878, the imports exhibited an increase of \$103,795,208.60, and the exports a decrease of \$51,822,963.60.

The excess of imports over exports, during 1878, amounted to \$195,430,136.20. This excess in 1877 amounted to the sum of \$39,811,964.

In the tables which follow, this commerce is presented in detail. It should be observed, in connection with these and some other tables in this report, that, in many instances, the totals given do not agree with actual additions. The totals given, however, are the exact quotients obtained from the French official statistics, and, as they are repeatedly quoted throughout the government publications in connection with comparisons and illustrations, I have deemed it more prudent to adhere to them.

## IMPORTS BY COUNTRIES.

*Statement showing, in round numbers and by countries of origin, the value of imports into France from all countries during the years 1877 and 1878 (general commerce).*

Countries.	1877.	1878.
England.....	\$144,000,000	\$140,260,000
United States.....	56,060,000	104,176,000
Germany.....	91,900,000	101,740,000
Italy.....	89,320,000	94,080,000
Belgium.....	92,940,000	93,580,000
Russia.....	41,740,000	80,160,000
Switzerland.....	66,920,000	67,500,000
Spain.....	31,060,000	34,800,000
India, British.....	32,920,000	28,360,000
Turkey.....	36,800,000	28,340,000
Argentine Republic.....	23,500,000	28,000,000
China.....	14,340,000	28,000,000
Algeria.....	25,160,000	24,500,000
Brazil.....	18,540,000	20,120,000
Sweden.....	11,340,000	15,280,000
Austria.....	11,600,000	12,660,000
Japan.....	9,360,000	8,940,000
Peru.....	12,400,000	7,920,000
Haiti.....	7,660,000	7,760,000
Africa, west coast.....	7,580,000	7,500,000
Egypt.....	12,140,000	7,040,000
Holland.....	7,600,000	6,940,000
Uruguay.....	6,660,000	6,540,000
Norway.....	5,380,000	5,740,000
Barbary States.....	4,660,000	5,480,000
St. Pierre Miquelon, and fisheries.....	5,520,000	5,380,000
Réunion.....	5,000,000	4,780,000

\* NOTE BY THE DEPARTMENT.—The statistical tables throughout Consul-General Fairchild's report are based upon the returns of the "general commerce" of France. As will be seen in that portion of the Secretary's letter dealing with the trade of France, the "special commerce" shows the true commerce of the country. Outside of the exaggerated idea which this report gives of the imports and exports of France (embracing, as they do, the transit trade in addition to the trade proper of the country), it is highly valuable and interesting.

## IMPORTS BY COUNTRIES—Continued.

Statement showing the value of imports into France from all countries, &amp;c.—Continued.

Countries.	1877.	1878.
India, Dutch.....	\$7,680,000	\$4,500,000
Venezuela.....	2,640,000	4,300,000
Guadeloupe.....	4,320,000	4,120,000
Martinique.....	4,540,000	4,080,000
Chili.....	3,080,000	3,020,000
Spanish American colonies.....	3,320,000	2,900,000
New Grenada.....	2,780,000	2,680,000
English American colonies.....	1,840,000	2,500,000
Senegal.....	2,160,000	2,380,000
Portugal.....	2,800,000	1,800,000
English African colonies.....	1,000,000	1,740,000
Greece.....	1,220,000	1,320,000
Mexico.....	1,300,000	1,260,000
Africa, other parts of.....	1,200,000	1,240,000
Denmark.....	320,000	680,000
India, French.....	600,000	680,000
Mayotte, Nosé Bè, Madagascar.....	640,000	540,000
English Mediterranean possessions.....	440,000	500,000
Australia.....	40,000	500,000
Guatemala.....	260,000	340,000
Ecuador.....	160,000	280,000
Cochin-China.....	660,000	240,000
Philippines.....	620,000	100,000
Oceania, other parts of.....	720,000	80,000
St. Thomas.....	180,000	80,000
Siam.....	180,000	80,000
Bolivia.....	280,000	60,000
Wrecks and salvage.....	140,000	90,000
Dutch American colonies.....	100,000	60,000
Guiana, French.....	60,000	60,000
Total.....	*913,975,000	*1,017,771,000

\* For exact figures of totals, see table exhibiting imports by kinds of merchandise.

## IMPORTS BY COUNTRIES.

Table showing the values, in round numbers, of imports, by articles, into France during the years 1877 and 1878 (general commerce).

Articles.	1877.	1878.
Cereals.....	\$51,320,000	\$128,120,000
Silk and waste silk.....	61,260,000	82,320,000
Wool.....	63,920,000	67,640,000
Animals.....	37,260,000	49,840,000
Wood, common.....	41,320,000	44,240,000
Cotton, raw.....	42,700,000	42,300,000
Silk tissues.....	39,680,000	37,940,000
Coffee.....	30,700,000	32,700,000
Skins and furs.....	32,120,000	31,680,000
Oil, crude and carbonized.....	33,300,000	29,880,000
Woolen tissues.....	23,820,000	22,440,000
Oil-seed.....	20,840,000	21,740,000
Grease of all kinds.....	10,900,000	15,120,000
Meats, fresh and salted.....	9,120,000	14,380,000
Flax.....	19,480,000	13,680,000
Wines.....	6,960,000	12,880,000
Sugar, French colonial.....	11,500,000	10,140,000
Cotton-yarn, not including waste.....	9,440,000	9,720,000
Machinery.....	8,440,000	9,520,000
Sugar, foreign.....	14,720,000	9,100,000
Oils, vegetable.....	12,800,000	9,100,000
Butter and cheese.....	7,880,000	8,540,000
Copper.....	8,640,000	8,040,000
Hats, straw, &c.....	7,520,000	7,340,000
Fruit.....	6,760,000	7,180,000
Skins, dressed.....	7,180,000	7,120,000
Indigo.....	4,160,000	6,920,000
Fruits, oleaginous.....	6,800,000	6,840,000
Fish.....	6,360,000	6,460,000
Jewelry, &c.....	5,280,000	6,440,000
Tobacco, unmanufactured.....	8,060,000	6,280,000
Ores of all kinds.....	9,040,000	6,200,000
Leather, manufactures of.....	5,540,000	5,640,000

## IMPORTS BY ARTICLES—Continued.

*Table showing the values of imports into France, &c.—Continued.*

Articles.	1877.	1878.
Matting .....	\$6, 140, 000	\$5, 560, 000
Horses .....	3, 930, 000	5, 000, 000
Soda and potash, nitrates of .....	5, 500, 000	4, 980, 000
Iron and steel .....	4, 430, 000	4, 820, 000
Cocoa .....	4, 820, 000	4, 800, 000
Brandy and spirits .....	3, 380, 000	4, 580, 000
Vegetables, dried, &c. ....	5, 280, 000	4, 500, 000
Rice .....	4, 240, 000	4, 360, 000
Guano and other manures .....	8, 300, 000	4, 340, 000
Oils, mineral .....	6, 220, 000	4, 210, 000
Lead .....	4, 720, 000	4, 040, 000
Woolen yarn .....	3, 400, 000	3, 980, 000
Hemp .....	4, 000, 000	3, 860, 000
Tissues, flax and hemp .....	3, 800, 000	3, 840, 000
Hardware .....	3, 500, 000	3, 760, 000
Stationery .....	3, 440, 000	3, 760, 000
Yarn, flax and hemp .....	3, 300, 000	3, 540, 000
Woods, cabinet .....	3, 420, 000	3, 280, 000
Clock-makers' material .....	2, 640, 000	2, 900, 000
Zinc .....	3, 600, 000	2, 800, 000
Pig iron, &c. ....	2, 680, 000	2, 060, 000
Jute .....	2, 420, 000	2, 020, 000
Tin .....	1, 780, 000	1, 900, 000
Tobacco (manufactured) .....	1, 880, 000	1, 840, 000
Hops .....	4, 140, 000	1, 760, 000
Sulphur .....	1, 460, 000	1, 600, 000
Arms of war .....	1, 500, 000	1, 240, 000
Saffron .....	1, 320, 000	1, 100, 000
Seeds .....	1, 760, 000	940, 000
Silk-worm eggs .....	780, 000	820, 000
Other articles .....	110, 020, 000	110, 600, 000
Total .....	913, 975, 391	1, 017, 770, 599
Increase during 1878 .....		103, 795, 208

## IMPORTS BY COUNTRIES.

*Statement showing, in round numbers and by countries of destination, the value of exports from France to all countries during the years 1877 and 1878 (general commerce).*

Countries.	1877.	1878.
England .....	\$264, 840, 000	\$227, 780, 000
Belgium .....	96, 340, 000	89, 200, 000
Germany .....	86, 420, 000	74, 820, 000
Switzerland .....	61, 140, 000	65, 920, 000
United States .....	63, 680, 000	61, 240, 000
Italy .....	59, 780, 000	53, 880, 000
Spain .....	40, 700, 000	42, 220, 000
Algiers .....	31, 440, 000	31, 040, 000
Turkey .....	11, 840, 000	19, 140, 000
Brazil .....	18, 100, 000	15, 840, 000
Argentine Republic .....	17, 080, 000	15, 420, 000
Holland .....	8, 620, 000	8, 540, 000
Egypt .....	6, 240, 000	7, 280, 000
Russia .....	3, 780, 000	7, 280, 000
Mexico .....	5, 120, 000	6, 520, 000
Austria .....	4, 500, 000	5, 540, 000
Portugal .....	6, 680, 000	5, 400, 000
New Grenada .....	4, 580, 000	5, 300, 000
Peru .....	4, 680, 000	5, 200, 000
Uruguay .....	4, 980, 000	4, 280, 000
Chili .....	5, 420, 000	4, 160, 000
Martinique .....	4, 180, 000	4, 140, 000
Spanish American colonies .....	4, 380, 000	4, 100, 000
Barbary States .....	3, 340, 000	3, 560, 000
Greece .....	3, 960, 000	3, 480, 000
India, British .....	3, 840, 000	3, 340, 000
St. Thomas .....	2, 680, 000	3, 320, 000
Japan .....	5, 140, 000	3, 304, 000
Guadeloupe .....	3, 180, 000	3, 280, 000

## EXPORTS BY COUNTRIES—Continued.

*Statement showing the value of exports from France, &c.—Continued.*

Countries.	1877.	1878.
China.....	\$1,340,000	\$2,960,000
Senegal.....	2,860,000	2,920,000
English African colonies.....	1,960,000	2,500,000
Venezuela.....	2,500,000	2,460,000
Haiti.....	3,500,000	2,430,000
Réunion.....	2,000,000	2,380,000
English Mediterranean possessions.....	1,920,000	2,060,000
Norway.....	2,640,000	1,700,000
Sweden.....	2,660,000	1,420,000
English American colonies.....	1,560,000	1,380,000
St. Pierre, Miquelon, and fisheries.....	1,340,000	1,360,000
Guiana, French.....	1,540,000	1,320,000
Denmark.....	1,040,000	1,180,000
Africa, west coast.....	1,440,000	1,120,000
Cochin China.....	1,040,000	1,060,000
India, Dutch.....	800,000	840,000
Australia.....	300,000	800,000
Oceania, other parts of.....	980,000	780,000
Guatemala.....	680,000	780,000
Ecuador.....	580,000	600,000
Dutch American colonies.....	540,000	480,000
Africa, other parts of.....	280,000	380,000
Philippines.....	360,000	300,000
India, French.....	240,000	200,000
Mayotte, Nossi Bé, Madagascar.....	60,000	80,000
Bolivia.....	60,000	20,000
Siam.....	60,000	20,000
Coal for steamers.....	260,000	300,000
Total exports.....	*874,163,009	*822,340,000

\* For exact figures of totals, see table exhibiting exports by kinds of merchandise.

## EXPORTS BY ARTICLES.

*Table showing the values, in round numbers, of exports, by articles, from France for the years 1877 and 1878 (general commerce).*

Articles.	1877.	1878.
Tissues:		
Silk and waste silk.....	\$85,380,000	\$80,580,000
Wool.....	75,740,000	71,220,000
Silks.....	40,280,000	44,180,000
Wines.....	45,100,000	41,420,000
Leather manufactures.....	35,440,000	37,340,000
Toys and furniture.....	33,180,000	33,020,000
Cotton tissues.....	29,560,000	27,920,000
Cereals.....	47,480,000	25,560,000
Sugar, refined.....	26,280,000	24,040,000
Hardware and cutlery.....	18,900,000	20,040,000
Butter and cheese.....	22,080,000	19,360,000
Cotton wool.....	17,740,000	18,900,000
Wool.....	16,480,000	18,740,000
Skins, prepared.....	18,800,000	18,660,000
Jewelry, &c.....	16,820,000	16,500,000
Brandy and spirits.....	13,690,000	16,880,000
Wearing apparel.....	17,940,000	15,560,000
Horses and cattle.....	14,580,000	11,840,000
Chemicals.....	11,060,000	11,890,000
Coffee.....	10,240,000	10,760,000
Stationery, &c.....	11,580,000	10,440,000
Skins and furs.....	9,900,000	9,990,000
Glassware and pottery.....	10,300,000	9,800,000
Eggs and game.....	8,580,000	8,800,000
Woolen yarn.....	5,520,000	7,620,000
Machinery.....	6,780,000	7,500,000
Fish, fresh and preserved.....	6,020,000	6,820,000
Oils, vegetable.....	8,160,000	6,960,000
Vegetables.....	5,160,000	6,780,000
Woods, common.....	7,890,000	7,740,000
Sugar, raw.....	10,680,000	6,400,000

## EXPORTS BY ARTICLES—Continued.

*Table showing the values of exports from France, &c.—Continued.*

Articles.	1877.	1878.
Tissues, flax and hemp .....	\$7,680,000	\$6,220,000
Fruits, table .....	7,820,000	6,140,000
Ladies' hats, and flowers, artificial .....	7,340,000	6,060,000
Clocks and materials for .....	5,400,000	5,380,000
Grease of all kinds .....	5,060,000	4,980,000
Cast iron and steel .....	3,980,000	3,920,000
Seeds .....	6,320,000	3,260,000
Flax and hemp .....	3,880,000	2,940,000
Rags .....	3,000,000	2,880,000
Oil, crude and carbonized .....	3,260,000	2,720,000
Oil-cake .....	2,660,000	2,380,000
Hats, felt .....	2,500,000	2,360,000
Musical instruments .....	2,440,000	2,360,000
Paints, artists' materials .....	2,140,000	2,360,000
Hair of animals of all kinds .....	2,520,000	2,320,000
Yarn, hemp and flax .....	2,220,000	2,300,000
Building materials .....	2,440,000	2,280,000
Copper .....	1,920,000	2,280,000
Objects of collection .....	3,400,000	2,240,000
Soap .....	1,980,000	2,120,000
Patent medicine .....	1,980,000	2,080,000
Cotton thread .....	1,320,000	1,960,000
Candles of all kinds .....	2,140,000	1,720,000
Indigo .....	1,140,000	1,640,000
Arms of war .....	1,820,000	1,600,000
Perfumery .....	1,580,000	1,560,000
Saffron .....	1,480,000	1,500,000
Meats, salted .....	1,180,000	1,300,000
Tobacco, manufactured .....	1,240,000	1,240,000
Fruits and grains, oleaginous .....	2,580,000	1,220,000
Paris articles .....	1,860,000	1,040,000
Ores of all kinds .....	800,000	640,000
Madder, extract of .....	260,000	80,000
Madder .....	300,000	80,000
Other merchandise .....	89,220,000	86,620,000
<b>Total exports .....</b>	<b>874,163,427</b>	<b>822,340,463</b>
<b>Decrease during 1878 .....</b>		<b>51,822,968</b>

## EXPORTS BY CUSTOM-HOUSES.

*Statement showing, in round numbers, the value of imports into France by custom-houses during the years 1877 and 1878 (general commerce).*

Custom-houses.	1877.	1878.
Marseilles .....	\$184,140,000	\$227,840,000
Havre .....	159,480,000	185,480,000
Paris .....	65,040,000	69,000,000
Boulogne .....	62,060,000	57,380,000
Bordeaux .....	45,840,000	51,580,000
Dunkerque .....	48,160,000	50,200,000
Rouen .....	14,700,000	18,080,000
Cette .....	15,480,000	18,020,000
Calais .....	14,100,000	15,980,000
Belfort-Petit-Croix .....	19,960,000	15,820,000
Emberménil-Ayricourt .....	13,680,000	15,680,000
Jeumont .....	15,620,000	15,120,000
Tourcoing .....	15,780,000	13,320,000
St. Nazaire .....	9,520,000	12,040,000
Nantes .....	11,100,000	10,580,000
Dieppe .....	6,860,000	8,260,000
Lille .....	7,500,000	7,740,000
Pagny .....	6,820,000	7,080,000
Valenciennes-Blancmisseron .....	1,740,000	6,780,000
Roubaix .....	5,300,000	5,120,000
Nice .....	2,600,000	3,240,000
Bayonne .....	1,240,000	2,080,000
Corsica .....	440,000	340,000
Other custom-houses .....	186,820,000	201,020,000
<b>Total .....</b>	<b>913,975,000</b>	<b>1,017,771,000</b>



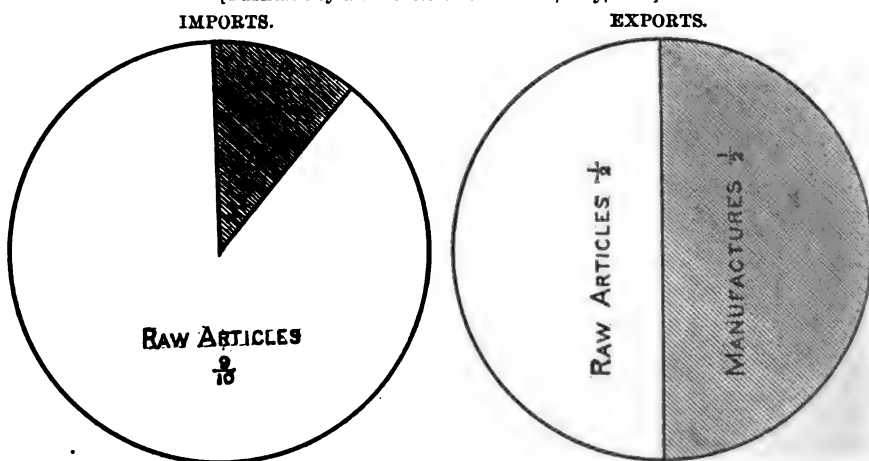
## EXPORTS BY CUSTOM-HOUSES.

Statement showing, in round numbers, the value of exports from France by custom-houses during the years 1877 and 1878 (general commerce).

Custom-houses.	1877.	1878.
Havre .....	\$147,580,000	\$143,960,000
Marseilles .....	131,140,000	139,920,000
Paris .....	104,960,000	94,800,000
Bordeaux .....	63,480,000	53,060,000
Boulogne .....	55,160,000	44,480,000
Dieppe .....	21,340,000	21,300,000
Belfort-Petit-Croix .....	27,520,000	20,820,000
St. Nazaire .....	17,180,000	20,300,000
Touroing .....	12,520,000	12,580,000
Jeumont .....	11,480,000	10,900,000
Cette .....	12,300,000	10,100,000
Rouen .....	12,780,000	9,980,000
Dunkerque .....	13,320,000	9,420,000
Roubaix .....	7,100,000	8,420,000
Valenciennes-Blancmisseron .....	2,020,000	8,040,000
Calais .....	8,480,000	7,340,000
Emberménil-Avrincourt .....	6,340,000	6,600,000
Lille .....	4,800,000	4,460,000
Pagny .....	5,920,000	3,920,000
Nantes .....	8,280,000	3,620,000
Bayonne .....	2,520,000	1,860,000
Corsica .....	1,000,000	700,000
Nice .....	420,000	440,000
Other custom-houses .....	196,520,000	185,320,000
<b>Total .....</b>	<b>874,160,000</b>	<b>822,340,000</b>

Diagrams showing the proportions of raw and manufactured articles entering into the commerce of France during five years ending with 1877.

[Published by the ministère des finances, July, 1879.]



## TRADE WITH THE UNITED STATES.

Under this head it is with much gratification that I am able to report that during the year 1878 we sold to France an excess of \$42,935,237.20 worth of our products, over and above what we purchased from her. The volume of this trade is thus stated :

Imports into France from the United States .....	\$104,176,270 40
Exports from France to the United States .....	61,241,033 20
<b>Balance in favor of the United States .....</b>	<b>42,935,237 20</b>

Particular importance attaches to this balance in our favor when it is considered that, since the year 1873, France's exports to the United States have exhibited an almost steady decline in value, decreasing from \$76,660,000 in that year to \$61,241,000 in 1878, while on the other hand her imports from the United States have increased in an enormously greater ratio—they being in 1873 of the value of \$42,840,000; and in 1878 of the value of \$104,176,000.

It will thus be seen that the balance in our favor alone during 1878 exceeds by \$95,000 the entire value of our exports to France in 1873.

The very poor results of agricultural operations during the past two seasons are mainly the cause of this change. A reference to the table herewith which gives the imports into France from the United States shows that, out of a total of \$104,176,000, grain, meats, grease, and provisions figure to the extent of \$58,884,000, or more than one-half. While our manufactures continue to be of minor importance in the list, it is encouraging to learn that the competition of our factories begins to occasion uneasiness, to some degree, to the manufacturing interests in France. The following extract from the report of the president of the "*commission permanente des valeurs*," addressed to the minister of agriculture and commerce, speaks for itself. The president says:

One of the most salient points of this report is the proof of the development of the industries of the United States. The American people who, until recent years, purchased of us the greater part of our manufactured articles, have, of late, established numerous factories in which they pursue European processes—processes which they have frequently perfected. Instead of remaining our tributaries, as in the past, they now consume the products of their own factories, and export, even upon the continent, and in competition with our manufactures, a certain number of articles, among which we notice works in leather and morocco, toys, watchmakers' materials, and steel tools. This is an important matter which, it appears to me, is proper to be brought to the notice of our manufacturers, in order that they may redouble their efforts to sustain the struggle with these new producers.

The declared value of exports from France to the United States during the year ending September 30, 1879, amounted to the sum of \$56,217,022.51, being an increase over the preceding year of \$10,388,077.44. The following articles show the most marked increase: Merinoes, cashmeres, and miscellaneous dress goods, for \$2,296,287; silk and manufactures of, \$1,751,843; laces and tulles, \$1,590,871; jewelry and precious stones, 622,965; wines and liquors, \$572,103; upholstery goods, \$506,475; works of art, \$420,854; hats and hatters' goods, \$385,589; calf-skins and leather, \$363,361; wool, \$313,176; gloves, \$290,987; argols and cream of tartar, \$288,516; chemicals, \$240,383; furniture, \$204,871; clocks and watches, \$183,535; glass, porcelain, and potteries, \$162,625; brandy, \$157,090; hardware, machinery, and rails, \$132,072; prunes, nuts, raisins, &c., \$122,083; dyestuffs, \$109,012; preserved fruits and vegetables, \$101,359; artificial flowers and feathers, \$83,806; corsets, \$44,160; scientific instruments, \$43,012; oils, \$42,472; books and engravings, \$35,300; albumen, \$32,314; India rubber, \$31,888; salt, \$30,781; carpets, \$23,160.

Decreases are noticeable in the following articles, to the amounts named: Cotton goods, \$375,068; woolen cloth, \$341,615; fancy goods, \$300,802; shawls, \$137,268; costumes and dresses, \$118,123; drugs and medicines, \$42,957; hosiery, \$35,944; hair, other than human, \$34,671; coffee and cocoa, \$30,157; buttons and trimmings, \$27,541; boots, shoes, and leather manufactures, \$26,406; lemons, \$15,042; rags and old paper, \$14,433.

The following tables show the commerce between the United States

and France, by kinds of merchandise, during the years 1877 and 1878, and by totals during the five years ending with 1878:

## IMPORTS FROM THE UNITED STATES.

Table showing the values, by kinds of merchandise, of imports into France from the United States during the years 1877 and 1878.

Articles.	1877.	1878.
Cereals .....	\$4,643,602 20	*\$38,358,185 20
Cotton, raw .....	25,591,767 00	30,693,399 40
Meats (fresh and salted) .....	4,688,146 80	9,896,829 20
Grease of all kinds, except fish-oil .....	5,022,688 60	9,106,609 20
Tobacco, raw .....	3,639,104 00	3,486,961 20
Oils, mineral, crude .....	4,431,009 00	3,395,837 60
Copper .....	1,554,551 00	1,281,772 40
Distilled liquors .....		1,127,350 00
Machinery .....	478,600 40	925,214 80
Oil, cotton-seed .....	125,496 80	859,822 40
Building material, timber .....	881,616 20	652,142 20
Oils, mineral, refined .....	1,544,612 60	564,919 60
Coffee .....	342,966 00	472,307 40
Oak staves .....	285,980 00	414,422 20
Hides, raw .....	157,997 60	336,855 60
Oils, fish .....	186,281 40	330,816 20
Silk-worm eggs .....	342,080 00	210,960 00
Bristles .....	49,086 80	194,014 80
Whalebone, unmanufactured .....	32,169 60	174,276 00
Resin .....	68,881 60	130,000 00
Fish, preserved, other than sardines .....	139,435 00	118,467 80
Utensils and manufactures of metals .....	78,002 20	112,044 80
Peruvian bark .....		103,119 80
Manufactures of wood .....	45,760 00	61,098 80
Silver ware .....		61,016 80
Pitch and turpentine .....		54,649 20
Silk, raw .....		46,101 20
Bones and hoofs .....	36,116 20	44,401 60
Seeds .....	77,552 80	40,010 00
Jewelers' dust .....	49,084 40	37,940 40
Potash .....	48,051 00	35,082 40
Yellow-oak bark .....	36,530 80	33,769 60
Sponges .....		33,292 80
Roe of codfish and mackerel .....	40,343 80	31,617 60
Hops .....	159,218 00	
Other articles .....	785,907 00	1810,966 20
Total .....	56,061,219 20	104,176,270 40
1877 .....		56,061,219 20
Increase, 1878 .....		48,115,051 20

\* This includes imports from the Pacific coast of .....

† This includes imports from the Pacific coast of .....

Total .....

## EXPORTS TO THE UNITED STATES.

Table showing the values, by kinds of merchandise, of exports from France to the United States during the years 1877 and 1878.

Articles.	1877.	1878.
Tissues of silk and raw silk .....	\$21,931,363 80	\$21,275,312 00
Trimnings, wool .....	10,378,473 20	11,744,200 60
Articles made of leather .....	4,034,052 40	3,764,945 20
Prepared hides .....	2,563,768 40	2,216,109 60
Buttons, &c. ....	2,142,578 60	1,986,354 80
Feathers for ornament .....	1,553,008 00	1,842,681 40
Trimnings and ribbons, cotton .....	1,688,990 00	1,644,837 00
Wine .....	1,740,908 60	1,416,022 40
Straw trimnings .....	2,847,490 60	1,413,021 20
Straw hats, &c. ....	1,336,199 40	1,408,983 20
Hair of animals of all kinds .....	782,421 00	836,350 60

## EXPORTS TO THE UNITED STATES—Continued.

Table showing the values, by kinds of merchandise, of exports from France, &c.—Continued.

Articles.	1877.	1878.
Bonnets and artificial flowers .....	\$846,401 00	\$730,220 60
Silk and raw silk .....	1,102,266 20	690,245 20
Clocks and watches .....	580,493 40	649,089 60
Imitation jewelry .....	721,500 00	645,260 00
Clothing and underwear .....	679,260 80	611,418 20
Glass-ware and pottery .....	549,135 00	496,622 80
Cutlery and hardware .....	586,480 80	478,049 00
Fish, preserved .....	399,693 60	452,069 40
Wool and waste wool .....	252,771 80	414,733 40
Toys, &c. ....	101,996 00	345,067 60
Sulphate of quinine .....	65,400 00	343,440 00
Stationery and books .....	442,620 00	336,638 80
Flax and hemp, manufactures of .....	401,065 20	335,722 00
Objects of collection .....	214,437 00	302,204 80
Raw hides and furs .....	261,453 60	298,323 00
Millstones .....	279,048 00	286,692 00
Oils, fixed .....	274,306 00	263,433 40
Liquors and spirits .....	244,026 80	251,123 40
Dyes .....	162,165 20	233,226 40
Tartrate of potash .....	151,333 00	189,220 20
Cheese .....	.....	173,790 40
Coal .....	150,177 80	153,542 00
Fruits, table .....	400,617 40	152,656 00
Scientific instruments .....	86,119 00	128,571 00
Stones, cut .....	45,509 60	123,070 80
Perfumery .....	117,021 60	111,111 20
Furniture .....	82,006 40	106,291 60
Soap, ordinary .....	135,049 80	99,324 80
Glycerine .....	101,715 40	90,067 80
Colors .....	95,879 60	98,486 80
Cast iron and steel .....	57,864 20	90,972 00
Salt, marine .....	.....	85,896 60
Nuts .....	117,247 00	83,900 20
Jewelry, gold and silver .....	235,585 00	83,660 00
Aniline dye .....	132,759 00	74,668 80
Oxide of zinc .....	85,337 60	60,305 20
Medicines, prepared .....	53,712 40	56,827 40
Machinery .....	95,652 20	55,970 60
Musical instruments .....	64,774 80	55,576 60
Sponges .....	.....	53,726 80
Madder .....	158,576 40	50,888 00
Wooden ware .....	73,130 00	50,531 80
Meats, fresh and salt .....	52,609 80	41,174 80
Tissues, raw silk .....	161,356 00	.....
Coffee .....	152,427 80	.....
Rags .....	135,163 00	.....
Vegetables, preserved .....	46,396 60	.....
Other articles .....	1,571,585 80	1,254,760 80
Total .....	63,687,393 60	61,241,033 20
1877 .....	.....	63,687,393 60
Decrease, 1878 .....	.....	2,446,360 40

Table showing the value of imports from the United States into France, and the value of exports from France to the United States during each year from 1873 to 1878, inclusive. (General commerce.)

Description.	1873.	1874.	1875.	1876.	1877.	1878.
Imports from United States .....	\$42,340,000	\$49,980,000	\$39,120,000	\$55,880,000	\$56,061,000	\$104,176,000
Exports to United States .....	76,060,000	79,420,000	72,100,000	64,380,000	63,687,000	61,241,000
Balance for France .....	33,620,000	29,440,000	32,980,000	8,480,000	7,626,000	.....
Balance for United States .....	.....	.....	.....	.....	.....	42,935,000

For the six years:

Imports .....	\$348,056,000
Exports .....	417,461,000

Balance remaining in favor of France .....

## NAVIGATION.

The number of voyages performed by vessels of all classes and of all flags to and from French ports during the year 1878 was 53,260, representing a total measurement of 16,688,000 tons. Compared with the year 1877, these figures show an increase of 509 voyages and of 1,681,000 tons. As to tonnage, the French marine participated in the following proportions: Sailing vessels, 29½ per cent.; steam vessels, 36½ per cent.; in both classes combined, 34½ per cent. The proportion in the latter respect during the year 1877 was 37 per cent.

The following tables show the figures of navigation between the United States and France during 1878, as well as the condition and employment of the French mercantile marine during said period:

*Statement showing the flag, number, and tonnage of vessels engaged in commerce between France and the United States during 1878.*

Flag.	With cargo.		In ballast.		Totals.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
<b>ENTERED.</b>						
United States.....	193	138,419	2	1,360	195	139,779
French.....	121	143,544	.....	.....	121	143,544
Other.....	1,111	784,410	1	250	1,112	784,660
<b>Total.....</b>	<b>1,425</b>	<b>1,066,373</b>	<b>3</b>	<b>1,610</b>	<b>1,428</b>	<b>1,067,983</b>
<b>CLEARED.</b>						
United States.....	28	16,073	148	116,141	176	132,214
French.....	67	118,458	37	24,147	104	142,605
Other.....	156	183,934	774	456,601	930	640,535
<b>Total.....</b>	<b>251</b>	<b>318,465</b>	<b>959</b>	<b>596,889</b>	<b>1,210</b>	<b>915,354</b>

*Condition of the French mercantile marine, December 31, 1878.*

Classification.	Sailing.			Steam.			Totals.		
	No.	Tons.	Crews.	No.	Tons.	Crews.	No.	Tons.	Crews.
Under 30 tons*.....	10,811	86,568	44,246	149	2,185	690	10,960	88,753	44,936
30 to 50 tons.....	985	37,316	5,863	66	2,568	452	1,051	39,884	6,315
60 to 80 tons.....	354	19,459	2,767	16	879	118	370	20,338	2,885
90 to 100 tons.....	901	69,682	7,408	64	4,902	502	965	74,584	7,910
100 to 200 tons.....	876	121,740	10,463	36	5,844	448	912	127,584	10,911
200 to 300 tons.....	403	100,139	5,289	27	7,038	457	430	107,177	5,746
300 to 400 tons.....	237	83,348	2,795	35	12,685	657	272	96,033	3,452
400 to 500 tons.....	159	70,685	2,287	24	10,743	474	183	81,408	2,761
500 to 600 tons.....	74	40,313	1,189	24	18,126	498	98	58,439	1,688
600 to 700 tons.....	75	45,949	1,214	23	15,455	614	98	61,404	1,823
700 to 800 tons.....	32	23,646	646	29	21,370	768	61	45,016	1,414
800 to 1,000 tons.....	20	17,338	449	14	12,156	611	34	29,494	1,066
1,000 to 1,200 tons.....	5	5,446	130	23	25,436	1,021	28	30,882	1,151
1,200 to 1,500 tons.....	7	8,436	174	13	17,556	464	20	26,992	638
1,500 to 2,000 tons.....	.....	.....	.....	20	35,104	1,268	20	35,104	1,268
2,000 tons and over.....	.....	.....	.....	25	58,761	2,011	25	58,761	2,011
<b>Total.....</b>	<b>14,939</b>	<b>730,075</b>	<b>84,919</b>	<b>†588</b>	<b>245,808</b>	<b>11,023</b>	<b>15,527</b>	<b>975,883</b>	<b>95,942</b>

\* These figures do not include boats of two tons and under engaged in shore fisheries, which number 10,324, embracing 14,986 tons, and employing 17,975 men.

† With a total horse-power of 80,108.

*Employment of the French marine during 1878.*

How employed.	No. of vessels.	Tonnage.	Crews.
Coast and small fishery.....	9,561	85,659	45,386
Bank fishery.....	504	56,296	11,729
Coasting.....	2,456	109,026	9,569
European seas and Mediterranean.....	1,025	209,375	9,922
Long voyages.....	1,023	478,877	16,779
Pilotage, towing, yachts, &c.....	958	36,650	2,557
Totals.....	15,527	975,883	96,942

## FISHERIES.

The total value of the products of this industry during the year 1878 was \$17,394,344, which, compared with 1877, shows a decrease of \$51,094, which is almost entirely confined to shore and river fishing. This decrease is considered as quite insignificant, and the general result of the year's operations is satisfactory. This is shown by reference to the figures for 1875, when the value only reached \$3,433,308, and in 1874 it was still less.

In quantities the figures are in some cases enormous, as will be seen from the following table:

Kinds.	1878.	Increase.	Decrease.
Cod.....kilograms..	29,023,311	1,997,355	.....
Herring.....do.....	21,764,707	.....	8,655,519
Mackerel.....do.....	7,368,143	.....	2,009,530
Sardines.....number..	1,919,302,829	813,252,622	.....
Anchovies.....kilograms..	860,347	284,338	.....
Other fish.....do.....	44,124,983	1,484,169	.....
Oysters.....number..	169,397,046	65,042,965	.....
Mussels.....hectoliters..	506,648	62,263	.....
Other shell-fish.....do.....	145,536	10,168	.....
Crustacee.....number..	1,490,249	109,427	.....
Prawns.....kilograms..	1,319,741	.....	8,798

The number of men employed in the New Foundland and Iceland fisheries amounted to 12,701; in the coast fisheries, 69,830; giving a total of 82,531. Adding to these the men, women, and children who conduct their operations on foot, catching shrimps, &c., and the total will reach 130,000 persons who obtain their living by maritime fishery.

The number of vessels engaged was 21,992, with a tonnage of 164,000, being an increase over 1877 of 427 vessels and 4,834 tons.

## RAILWAYS OF FRANCE.

The total number of miles of railway in operation at the close of the year 1878 was 13,789.

The total receipts for 1878 were \$181,177,043; 1877, \$169,106,572; being an increase of \$12,070,571.

Of these 13,789 miles of railway, 12,812 miles were in the hands of the various companies, and 977 miles were exclusively the property of the State.

## CANALS.

The canals now existing in France are about 3,000 miles in length, and, while affording great facilities for the transportation of agricultural and mining products, they are still insufficient to meet the demands that are

made upon them, and to afford, in competition with the railways, the cheaper freights that the French farmers and miners ask; so that, in a measure, foreign producers may be kept at a distance. A large number of projects are now receiving the consideration of the French Government. They embrace plans for a thorough network of canals, the estimated cost of which amounts to 925,000,000 francs (\$185,000,000), and it is to be presumed that from the interest manifested in the undertaking throughout the country, and from its urgency and practicability, much will be undertaken in the near future.

During the year 1878 the internal revenue derived from taxes, connected exclusively with the navigation of canals and rivers, amounted to \$854,660.61. As compared with the year 1877, these receipts show a decrease of \$25,796.91. The quantity of merchandise transported in 1878 amounted to 1,787,403,141 tons, showing a decrease of only about one per cent. in comparison with the year preceding. This difference loses importance in view of the fact that, since the year 1872, this branch of commerce has advanced in extent fully 14 per cent.

#### COAL MINES.

##### *Production for 1877 and 1878.*

	Tons.
1878:	
Pit coal and anthracite.....	16,618,998
Lignite .....	477,565
Total for 1878 .....	17,096,563
Total for 1877 .....	16,804,529
Increase for 1878 .....	292,034

There were imported into France during 1878, in round numbers, 8,300,000 tons of pit coal, being an increase of about 1,100,000 tons over 1877. In this importation England figured to the amount of nearly 4,000,000 tons, and Belgium to the amount of nearly 3,600,000 tons.

The exportations were about 1,070,000 tons, showing an increase of over 164,000 tons compared with 1877. As above, the excess of imports over exports in 1878 was 7,230,000 tons.

The import duty on coal is 12 centimes per 100 kilograms, or about 23 cents per ton.

##### *Production of metals in 1878.*

	Tons.
IRON.	
Rails .....	52,478
Refined iron .....	27,307
Sheet iron .....	123,666
Other iron .....	601,890
Total .....	805,341
Production of 1877 .....	874,695
Decrease for 1878 .....	69,354

#### STEEL.

Rails .....	223,514
Bessemer, Siemens, Martin, and other (cast) .....	32,830
Puddled .....	12,901
Cemented .....	1,690
Refined cast .....	7,652
Sheets and plates .....	10,740
Total .....	289,327
Production of 1877 .....	255,217
Increase for 1878 .....	34,110

## WINE PRODUCT OF 1877 AND 1878.

The area of vineyards in 1874 was 6,046,441 acres, a figure never previously exceeded. Since that date, owing to the ravages of the *phylloxera*, a reduction has occurred of 373,023 acres. As compared with 1877, the area in cultivation in 1878 decreased about 123,500 acres, the figures for 1878 being 5,673,418 acres.

The product of wine for 1877 was 1,240,917,986 gallons; for 1878, 1,071,852,166 gallons; decrease, 169,065,820 gallons.

The mean product for the last ten years was 1,249,907,186 gallons; product for 1878, 1,071,852,166 gallons; decrease, 178,055,020 gallons.

In the wine districts known as Armagnac, Bordelais, Périgord, Angoumois, and Saintonge the ravages of the *phylloxera* and the *oidium* have been most severe, causing in these sections alone a decrease of about 88,000,000 gallons, as compared with 1877, and of about 44,000,000 gallons as compared with the mean of the ten preceding years. In these districts the yield per hectare, which was formerly 550 to 660 gallons, during 1878 was only 330 to 440 gallons.

The American vine-stocks, which have been planted as an experiment, have given great satisfaction, and, although of course in many instances not equaling the yield or quality of the old vines, have yet shown great resistance to the disease. The treatment by sulphuret of carbon has been followed with great success where its application has been made intelligently. The cost of applying it is at the rate of about 250 to 300 francs (\$50 to \$60) per hectare for two dressings. Where feasible, as alongside the banks of rivers, it is found advisable to turn the water over the vineyard and submerge it, inasmuch as the mud deposited by this means has a good effect in killing the *phylloxera*.

The estimated wine product for the season of 1879 is given as 670,416,296 gallons, a decrease, compared with 1878, of 401,435,870 gallons.

## CIDER.

The product of this article for 1877 was 293,588,790 gallons; for 1878, 262,586,522 gallons; decrease, 31,002,268 gallons.

As compared with the mean product for the past ten years, 1878 shows a decrease of about 15,400,000 gallons.

## ALCOHOLS.

*Production and movement during the years ending September 30, 1877, and September 30, 1878.*

	1878.	1877.
	<i>Gallons.</i>	<i>Gallons.</i>
Stock on hand at end of preceding year.....	4, 190, 560	5, 389, 648
In the hands of boilers and distillers:		
Produced from wine.....	1, 955, 646	1, 210, 230
Produced from farines.....	3, 652, 616	3, 561, 272
Produced from beets.....	7, 012, 500	3, 719, 144
Produced from molasses.....	14, 455, 078	14, 623, 858
Produced from other substances.....	698, 434	841, 090
Importations.....	2, 596, 060	1, 983, 454
Delivered for internal consumption.....	28, 357, 868	23, 083, 236
Exportations.....	6, 513, 782	7, 340, 872

## SILK.

The unfavorable weather of the year 1878 interfered with the successful rearing of the silk-worm, so that only 7,000,000 kilograms, 15,435,000



pounds of cocoons were produced ; that is to say, 30 per cent. less than in 1877. Nevertheless, owing to importations from Italy, from the Tyrol, and from Asia, the demands of the French manufacturers have been met, with but comparatively little inconvenience, and the silk commerce has still shown a value reaching to about 800,000,000 francs (\$160,000,000). In this trade the city of Lyons figures for about 400,000,000 francs (\$80,000,000), and the city of Saint Etienne for about 60,000,000 francs (\$12,000,000), which is considered here as excellent proof that these great centers of manufacturing industry continue to maintain with energy the struggle against their foreign competitors, who, in many respects, are often more favorably situated in that which concerns the cost of materials and labor.

The official publications of the French Government furnish the following information as to the imports and exports under this head :

[General commerce.]

SILK IMPORTS, 1878.

Cocoons, dry and fresh .....	\$4, 826, 666
Raw silk .....	66, 389, 261
Colored thread, &c. ....	375, 400
Carded, combed, and other unmanufactured .....	10, 781, 869
Pure silk tissues .....	13, 419, 516
Mixed silk tissues .....	2, 540, 997
Gauze and crêpes .....	578, 136
Tulles .....	225, 109
Laces .....	239, 034
Waste tissues .....	216, 188
Trimnings .....	83, 072
Ribbons .....	20, 642, 832
Total .....	120, 318, 080

SILK EXPORTS, 1878.

Cocoons .....	\$1, 942, 387
Raw silk, &c. ....	29, 746, 699
Colored thread, &c. ....	393, 855
Other colored silk .....	4, 596, 025
Waste, combed, and carded .....	7, 578, 247
Pure silk tissues .....	36, 342, 200
Mixed silk tissues .....	9, 935, 726
Gauzes and crêpes .....	3, 853, 868
Tulles .....	1, 429, 680
Laces .....	282, 849
Waste tissues .....	729, 108
Hosiery, &c. ....	312, 897
Trimnings .....	3, 474, 825
Ribbons .....	23, 957, 168
Total .....	124, 574, 534

SUGAR.

The operations under this head are thus given :

*Refined juice.*

	Gallons.
Year 1878, 509 factories .....	\$1, 323, 096, 280
Year 1877, 514 factories .....	1, 029, 344, 250
Increase for 1878 .....	293, 752, 030

*Stock of sugar, including season's product and amount remaining on hand from preceding year.*

	Kilograms.
Season of 1878 .....	\$418,478,914
Season of 1877 .....	280,307,544
Increase for 1878 .....	138,171,370

*Imports and exports of sugar, 1877 and 1878.*

Description.	1877.	1878.
<b>IMPORTS.</b>		
French colonial sugar .....	\$11,500,000	\$10,140,000
Foreign sugar .....	14,720,000	9,100,000
Total .....	26,220,000	19,240,000
<b>EXPORTS.</b>		
Refined sugar .....	\$28,280,000	\$24,040,000
Raw sugar .....	10,680,000	6,400,000
Total .....	38,960,000	30,440,000

*Wheat product of France for the years 1877 and 1878.*

Years.	No. of acres sown.	No. of bushels harvested.	No. of bushels per acre (average).	Mean price per bushel.
1877 .....	17,240,838	275,500,686	15.9+	\$1.64+
1878 .....	16,909,947	262,089,690	15.4+	1.61+
Decrease .....	330,886	12,410,996	.5+	0.03+

It is estimated that the harvest of 1879 will show a production of 220,080,000 bushels. As the production of ordinarily good years reaches the amount of 275,000,000 bushels, this exhibits a falling off of about 20 per cent.

The importations of cereals in 1878 reached the largest figure yet known, viz, 15,350,000 quintals, or 1,510,826 tons avoidupois. A comparative statement of these importations shows:

Imports for 1877 .....	\$51,320,000
Imports for 1878 .....	128,120,000
Increase for 1878 .....	76,800,000

**BANK OF FRANCE.**

The gross operations of the bank for 1878 were .....	\$1,957,327,940
For 1877 they were .....	1,902,116,600
Increase .....	55,211,340

**DISCOUNT.**

The operations under this head during 1878 were .....	\$1,521,261,140
During 1877 they were .....	1,515,563,580
Increase .....	5,697,560

In the amount for 1878 the head office at Paris participated for \$621,245,249. The rate of discount was, from January 1 to April 5, 1877, 3 per cent.; April 5, 1877, to October 16, 1878, 2 per cent.; Octo-

ber 16 to December 31, 1878, 3 per cent. The tax upon advances has been fixed at 4 per cent. since October 16, 1878.

The metallic reserve of the bank and its branches, December 31, 1878, was \$408,340,000; December 31, 1877, it was \$405,440,000; the increase being \$2,900,000.

The bank-note circulation January 31, 1879, was as follows:

Denomination.	No. of notes.	Value.
		<i>Francs.</i>
5,000 francs each.....	5	25,000
1,000 francs each.....	1,382,379	1,382,379,000
500 francs each.....	753,599	376,799,500
200 francs each.....	3,087	617,400
100 francs each.....	5,046,031	504,603,100
50 francs each.....	318,166	15,908,300
25 francs each.....	29,525	738,125
20 francs each.....	428,537	8,570,740
5 francs each.....	206,653	1,033,265
Old types.....	1,245	436,400
Total in francs.....	8,165,227	2,290,970,830
Total in dollars.....		\$458,194,166

Reckoning the population of France in round numbers at 37,000,000, this would show a paper-money circulation of 12.38 per capita.

At the close of 1878 there were in operation, in addition to the head office at Paris, 86 branches, with a total *personnel* of 1,669. The net profits of the institution for 1878 amounted to \$1,518,469, and the net dividend per share was \$18.34. The shares were quoted December 31, 1878, at \$594.92, 3,082.50 francs.

#### NATIONAL DEBT.

The consolidated debt of France on the 1st of January, 1879, amounted to \$3,972,407,312.44, and was bonded as follows:

5 per cent. bonds.....	\$1,383,494,048 00
4½ per cent. bonds.....	166,412,351 11
4 per cent. bonds.....	2,230,480 00
3 per cent. bonds.....	2,420,270,433 33
Total.....	3,972,407,312 44

As compared with the amount of the debt on the 1st of January, 1878, this shows a decrease of \$3,488,107.56.

Comparing the above principal of the French debt with that of the United States at the same period we have the following result:

Debt of France.....	\$3,972,407,312 44
Debt of the United States.....	2,267,702,345 00
Difference.....	1,704,704,967 44

#### TAXES.

The total product of state taxes for the year 1878 amounted to 2,902,225,700 francs (\$580,445,140), which, as compared with the year 1877, shows an increase of 75,487,500 francs (\$15,097,500). The following exhibits the sources of revenue in detail:

Direct taxes, 1878.....	\$143,240,940
Direct taxes, 1877.....	141,107,320
Increase for 1878.....	2,133,620

Income taxes, 1878 .....	\$6,854,800
Income taxes, 1877 .....	6,828,400
<b>Increase for 1878 .....</b>	<b>26,400</b>
<b>Indirect taxes:</b>	
Registration, &c .....	\$97,474,600
Stamps .....	31,775,600
Customs, divers merchandise, import .....	40,095,600
Customs, colonial sugar, import .....	7,540,800
Customs, foreign sugar, import .....	6,886,000
Customs, export dues .....	45,000
Statistics, duties .....	1,227,200
Navigation duties .....	1,180,000
Customs, divers .....	739,800
Salt, customs .....	4,238,800
Salt, indirect .....	2,339,200
Liquors .....	81,716,600
Native sugar .....	21,888,400
Matches .....	3,206,600
Chicory .....	1,027,800
Paper .....	2,971,200
Mineral oil .....	31,000
Other oil taxes .....	1,190,000
Soap .....	262,200
Stearine and candles .....	1,474,400
Vinegar and acetic acid .....	420,400
Dynamite .....	79,200
Passengers' fares, railway .....	15,241,800
Passengers' fares, other conveyances .....	1,188,600
Railway receipts, 5 per cent. tax .....	2,241,400
Divers indirect taxes .....	9,574,000
Tobacco monopoly .....	66,434,800
Powder monopoly .....	2,662,400
Post-office .....	20,971,400
Telegraphs .....	4,224,000
<b>Total for 1878 .....</b>	<b>430,349,400</b>
<b>Total for 1877 .....</b>	<b>417,411,920</b>
<b>Increase for 1878 .....</b>	<b>12,937,480</b>

## BUDGET FOR 1879.

By the law of December 22, 1878, the figure of credits opened for the ordinary budget for the year 1879 amounted to the sum of \$540,017,558.40. Since the passing of the above law additional appropriations have been made, and others are still under deliberation, which, taken together with the amount originally allowed, will swell the expenses of the year to the sum of \$554,822,134.93, which is given in detail as follows:

Public debt* (finances, first section) .....	\$241,880,601 80
Justice .....	6,890,711 83
Foreign affairs .....	2,646,010 00
Ministry of the interior .....	14,288,313 21
Religion .....	10,723,455 76
Algeria .....	4,592,727 49
Ministry of finances, general service (second section) .....	8,099,971 92
Posts and telegraphs .....	21,521,520 20
Ministry of war .....	111,223,350 81
Ministry of marine and colonies .....	39,794,965 62
Public instruction .....	11,649,755 20
Fine arts .....	1,514,002 00
Ministry of agriculture and commerce .....	7,063,894 20
Ministry of public works (first section) .....	16,058,571 63
Ministry of public works (second section) .....	18,907,304 95
Ministry of finances (third section) .....	34,767,978 20
Ministry of finances (fourth section) .....	3,199,000 00
<b>Total .....</b>	<b>554,822,134 93</b>

\* Including expenses of executive and legislation.

The receipts for the year 1879, of course, cannot yet be determined with sufficient accuracy to be really valuable. Those for 1878 are stated at \$570,469,396.20. The expenses of 1878, so far as determined, amounted to \$569,042,099.80, showing an excess of receipts over expenses of \$1,427,296.40. Comparing the expenses of the two years, we have the following result:

Expenses of 1878 .....	\$569, 042, 099 80
Expenses of 1879 .....	554, 822, 134 93
Decrease for 1879 .....	14, 219, 964 87

#### PROPOSED BUDGET FOR 1880.

The budget for the year 1880, as modified by the parliamentary commission, is proposed as follows:

Public debt, legislative, executive, and pensions .....	\$246, 447, 742
Justice .....	6, 862, 400
Foreign affairs .....	2, 651, 460
Ministry of the interior .....	13, 405, 601
Algeria .....	4, 796, 772
Ministry of finances (general service) .....	3, 954, 520
Posts and telegraphs .....	20, 996, 552
Ministry of war .....	113, 611, 826
Marine service .....	32, 792, 436
Colonial service .....	6, 100, 888
Public instruction .....	11, 260, 255
Fine arts .....	1, 618, 900
Religion .....	10, 797, 064
Ministry of agriculture and commerce .....	7, 144, 803
Ministry of public works (ordinary) .....	16, 171, 623
Ministry of public works (extraordinary) .....	14, 492, 487
Ministry of finances (customs, internal revenue, monopolies, &c) .....	34, 610, 388
Ministry of finances, (restitutions, reimbursements, premiums on certain exportations, and miscellaneous) .....	2, 999, 800
Total .....	550, 715, 537

Among the items covered by the above general statement, the following are interesting and curious from an American point of view: Civil pensions, \$12,052,124; military pensions, \$14,431,600; ecclesiastical pensions, \$5,800; salary of the President of the republic, \$120,000; household expenses of the President, \$60,000; traveling and miscellaneous expenses of the President, \$60,000; Senate and Chamber of Deputies, \$2,164,200; diplomatic and consular, \$2,472,120.

#### ARMY.

The expenses of the ministry of war, as provided for by the budget of 1879 and by other credits opened and demanded, are estimated at \$111,223,350.80. The recruitments in progress afford a basis for fixing the number of men in the army for the year 1880. It is given as follows:

Total strength, 968,300 men; of which number 407,796 will belong to the active army; 313,859, with 2,850 officers, to the reserve of the active army; and 149,000, with 4,800 officers, to the territorial army.

The number of men who will join the active army as recruits next year will be 164,554, distributed as follows: Infantry, 108,729; cavalry, 16,363; artillery, 25,221; engineers, 3,544; train, 5,442; administration, 5,275. Of these 164,544 men, 107,300 will serve from three to five years, and 57,254 one year.

According to statements by the minister of war, in the documents accompanying the budget of 1880, the proportion of men on duty is estimated at 91½ per cent. of those enrolled in the active army, 3 per cent. in hospital, 4 per cent. on leave, and 1½ per cent. deserted or in prison.

The number of horses in the army is reckoned at 124,913.

The composition of an infantry regiment of the line is as follows: Total strength 1,656 men and officers, and 16 horses. The regiment is divided into four battalions of four companies each, and a "dépôt" of two companies, making eighteen companies in all. A company numbers 87 men, of whom 3 are officers, 7 are under-officers, 8 are corporals, 2 are drummers or trumpeters, 66 are privates, and one "*enfant de troupe*."

## NAVY.

The amount granted to this service in the budget of 1879 was \$32,183,416.

The total number of persons under this ministry is stated to be 101,387, distributed as follows:

Land service.....	62,514
Sea service.....	27,094
Reserve service.....	1,718
Colonial service.....	10,061

The number of vessels in active service (commission) is 132. The number in reserve is 94. The number of steam vessels is stated to be 179, with a total horse-power of 31,821.

The number of vessels in course of construction is as follows:

Iron-clads of the first class.....	7
Iron-clads of the second class.....	6
Coast-guard vessels of the first class.....	8
Coast-guard vessels of the second class.....	2
Gunboats.....	4
Cruisers of the first class.....	3
Cruisers of the second class.....	6
Transports.....	3

The amount asked by the ministry of the marine in the budget of 1880, for the completion and for the continuation of work upon these vessels, amounts to \$6,400,200.

*French postal circulation and receipts from 1850 to 1878.*

Years.	Letters.	Printed matter, cards, samples, &c.	Receipts.
	<i>Number.</i>	<i>Number.</i>	
1850.....	159,500,000	94,622,000	\$7,692,400
1851.....	165,000,000	33,968,000	7,921,600
1852.....	181,000,000	94,884,000	8,695,800
1853.....	185,542,000	99,587,000	9,177,400
1854.....	212,385,000	115,774,000	10,004,000
1855.....	233,517,000	123,647,000	9,908,800
1856.....	252,015,000	127,821,000	10,312,200
1857.....	252,454,000	144,295,000	10,492,000
1858.....	253,234,000	153,295,000	10,607,000
1859.....	258,900,000	165,900,000	11,837,800
1860.....	263,500,000	179,138,000	11,781,200
1861.....	273,200,000	188,930,000	12,240,000
1862.....	283,000,000	202,000,000	12,814,763
1863.....	290,000,000	232,000,000	13,455,204
1864.....	300,543,700	264,963,000	13,647,201
1865.....	313,506,795	275,285,920	14,896,710
1866.....	323,535,195	290,091,180	14,892,081
1867.....	342,017,470	306,195,880	15,714,834
1868.....	348,655,000	326,190,800	16,263,919
1869.....	364,746,650	367,180,800	17,192,443
1870.....	381,851,580	347,958,640	18,108,822
1871.....	395,114,570	283,987,730	17,202,648
1872.....	339,712,068	297,867,799	20,100,730
1873.....	340,855,289	331,550,962	20,686,092
1874.....	350,594,785	368,781,945	21,187,634
1875.....	397,448,887	376,005,934	22,148,883
1876.....	381,965,353	452,406,978	22,009,372
1877.....	393,843,000	468,898,000	22,786,496
1878.....			24,944,462

In the budget as passed for the year 1879, the estimated receipts from posts and telegraphs are \$25,459,000; the appropriation for the service is \$19,814,001; showing a gain of \$5,644,999.

December 31, 1878, there were 5,777 post-offices and 92,275 miles of telegraph lines.

The proportion of the number of letters per inhabitant passing through the post is thus stated by the French postal authorities for the several continental nations:

Letters per inhabitant:

Switzerland.....	20
France.....	15
Germany.....	15
Netherlands.....	14
Belgium.....	13
Denmark.....	9
Austro-Hungary.....	6
Spain.....	5
Sweden.....	5
Italy.....	4
Norway.....	4
Portugal.....	2

In 1876 France occupied the fifth place in the above table. Her advance since then is attributed to her reforms in domestic administration, and to her accession to the postal union.

MISCELLANEOUS.

*Electoral statistics.*—On the 31st of March, 1879, there were inscribed in France 10,092,843 electors; of which number 183,229 were entitled to vote in legislative elections only, and 9,909,614 were entitled to vote in both municipal and legislative elections. The total number, as compared with the year 1878, shows a decrease of 23,977.

*Patents.*—During the year 1878 patents for inventions were issued as follows:

Patents for 5 years.....	46
Patents for 10 years.....	54
Patents for 15 years.....	6,026
Patents, foreign.....	222
Certificates of addition.....	1,633
Total.....	7,961

For preceding years they were—

1866.....	5,671
1867.....	6,098
1868.....	6,103
1869.....	5,906
1870.....	3,850
1871.....	2,782
1872.....	4,875
1873.....	5,074
1874.....	5,746
1875.....	6,007
1876.....	6,750
1877.....	7,101
1878.....	7,981

*Mint.*—The amount of gold, silver, and bronze coins produced at the mints of Paris and Bordeaux, during 1877 and 1878, is given as follows:

Coin.	1877.	1878.
	<i>Francs.</i>	<i>Francs.</i>
Gold.....	255,181,140.00	185,818,100.00
Silver.....	16,464,285.00	1,821,420.00
Bronze.....	197,516.45	88,439.50
Total.....	271,842,941.45	187,227,959.50

## FORESTS.

According to the latest official statistics (year 1877), the total superficial area of France is given at 51,982,569 hectares; of which amount 8,976,133 hectares, or about 17 per cent., were in forests, not comprising ornamental parks, nurseries, orchards, &c. The percentage of all Europe in this regard is 40. As regards area of forests, France occupies the eighth rank in comparison with the other European States; the first place being held by Russia, and the last by Denmark.

The distribution of forests in France presents, of course, in different departments great contrasts; the department of the Seine ranking lowest, with only 2 per cent. of its total area in woods, while that of Landes amounts to 47 per cent.

The proprietorship of the forests is thus distributed: To the state, 10.7 per cent.; to departments, communes, &c., 22.4 per cent.; public establishments, 0.3 per cent.; private owners, 66.6 per cent.

## LIFE AND FIRE INSURANCE.

*Life insurance.*—The year 1878 shows the best record ever yet attained by the French companies. The following statement shows the amounts insured on lives and annuities during 1877 and 1878:

	1877.	1878.
Capital insured (lives).....	\$55,296,000	\$63,048,800
Annuities.....	582,142	668,830
Total.....	55,878,142	63,712,630
Increase during 1878.....		7,834,488

*Fire insurance.*—The operations under this head during 1877 and 1878 were as follows:

Years.	Risks.	Premiums received.	Losses.
1877.....	\$17,506,245,463	\$17,019,130	\$7,948,558
1878.....	19,272,406,632	17,958,477	8,547,680
Increase.....	1,766,061,169	939,347	599,122

LUCIUS FAIRCHILD.

UNITED STATES CONSULATE-GENERAL,  
Paris, December 13, 1879.



## BORDEAUX.

Statement showing the commerce of Bordeaux for the year 1878.

## IMPORTS.

Articles.	General imports.		Special imports.		
	Quantity in metrical quintals.	Value.	Quantity in metrical quintals.	Value.	Amount of duties.
Animal hair .....	2,209	\$92,954 59	2,209	\$92,954 59	.....
Arms .....	496	135,122 00	30	10,133 46	\$1,243 88
Boats and vessels .....	12,285	122,288 66	12,285	122,288 66	940 29
Bran .....	71,176	192,318 51	71,190	192,354 41	8 49
Brandy and liquors .....	126,814	1,756,223 18	114,855	1,566,470 79	119,281 54
Cacao .....	30,779	1,336,550 28	7,704	334,524 58	155,054 65
Candles .....	3,945	103,293 40	163	4,728 68	17,067 49
Cheese .....	23,569	683,181 97	22,816	660,532 85	4,113 60
Chlorate of potash .....	39,542	111,025 75	39,383	110,538 43	77 39
Clocks and watches .....	81	118,843 61	5	848 81	46,584 60
Coal .....	2,417,277	849,092 69	2,011,421	706,531 69	1,766,407 02
Coffee .....	114,282	4,124,561 66	58,566	2,114,878 88	55 39
Copper .....	35,735	1,060,217 82	34,270	1,020,590 75	5 59
Dyestuffs .....	4,102	114,001 43	4,111	114,260 43	11,796 99
Fat of all kinds .....	61,912	1,308,839 92	61,101	1,288,262 26	11,357 47
Feathers .....	257	397,138 99	257	397,138 99	2,229 18
Fish, fresh, dried, and in oil .....	179,000	2,161,391 58	177,431	2,112,025 82	1,461 01
Fish, oil of .....	8,105	81,473 24	7,985	79,688 15	116 76
Fruits .....	4,765	71,189 40	4,121	53,868 47	115,384 66
Gold and silver .....	565	2,835,874 25	565	2,835,874 25	4 43
Grains and flour .....	1,208,120	6,575,736 19	1,158,411	6,288,073 74	140 69
Guano and other manures .....	124,480	712,580 31	124,289	712,261 86	864 25
Gums, pure and exotic .....	18,403	472,383 32	18,880	472,026 66	846 11
Hemp .....	9,343	171,298 88	9,346	171,366 82	726 45
Hides and skins .....	201,573	6,029,805 78	201,241	6,019,030 39	47,397 71
Indigo .....	620	185,452 15	618	184,716 24	6,328 85
Iron and steel .....	282,064	296,580 78	217,450	256,613 18	19,458 83
Jewelry, in gold .....	5	365,812 20	.....	21 80	100 93
Machinery .....	9,318	238,302 50	4,443	129,256 55	6,782 79
Meats, fresh and salted .....	29,023	851,624 08	21,293	642,723 96	1,649 76
Molasses .....	117,614	272,394 02	117,612	272,398 77	1 73
Nitrate of potash and soda .....	56,651	481,509 74	56,333	478,264 80	211,258 18
Oils .....	11,000	207,737 28	7,031	118,522 84	420,363 65
Paper, books, and engravings .....	2,037	74,738 67	1,118	36,552 84	480 57
Peasants .....	112,840	544,451 64	112,840	544,451 64	2,167 00
Pepper .....	6,027	133,775 05	5,262	116,783 91	4 43
Petroleum .....	59,810	417,282 79	71,293	489,341 46	7,226 49
Powder .....	5,547	160,585 45	5,543	160,476 02	9,861 91
Pottery and glassware .....	8,038	108,546 09	6,020	30,425 87	32,093 97
Quinquina .....	1,371	174,098 54	1,371	174,098 54	8,942 46
Rags .....	9,270	78,201 86	9,156	72,361 68	5,174 33
Rice .....	75,912	524,687 29	60,889	373,641 82	27,300 04
Starch .....	7,964	84,853 60	7,706	81,900 73	363 03
Stones, for building .....	68,554	102,033 69	68,552	102,028 48	47 28
Sugar .....	228,280	2,313,401 44	193,598	1,968,834 86	.....
Sulphur .....	28,624	89,864 27	28,624	89,864 27	.....
Thread .....	1,063	86,421 34	85	3,852 66	.....
Tartar, crude .....	2,419	71,418 49	2,419	71,418 49	.....
Tissues of cotton .....	12,198	1,325,098 24	483	51,960 81	.....
Tissues of silk .....	63	104,478 62	18	26,444 66	.....
Tissues of wool .....	1,925	289,378 60	1,892	200,343 45	.....
Tobacco, in leaves .....	87,001	1,679,120 45	51,304	990,167 77	.....
Tobacco, manufactured .....	924	161,142 45	47	28,694 27	.....
Tools .....	10,920	87,763 08	7,451	48,598 36	.....
Vanilla .....	213	205,099 40	65	62,184 60	.....
Vegetables, dried .....	14,936	115,303 79	15,065	116,457 93	.....
Wines .....	48,193	409,141 47	41,781	279,222 75	.....
Wood .....	1,962,587	5,646,374 99	1,062,500	5,645,628 08	.....
Wool .....	30,598	1,370,058 75	30,577	1,369,116 13	.....
Zinc .....	12,972	107,654 82	12,972	107,654 82	.....
Articles not elsewhere specified .....	274,779	1,631,981 17	257,214	1,489,785 14	.....
<b>Total .....</b>	<b>8,230,195</b>	<b>52,614,404 92</b>	<b>7,522,768</b>	<b>44,289,306 90</b>	<b>4,783,796 43</b>

Statement showing the commerce of Bordeaux, &amp;c.—Continued.

## EXPORTS.

Articles.	General exports.		Special exports.	
	Quantity in metrical quintals.	Value.	Quantity in metrical quintals.	Value.
Acetate of copper.....	2,177	\$105,900 45	2,177	\$105,900 45
Almonds and nuts.....	10,130	184,601 00	10,111	184,419 80
Brandy, spirits and liquors.....	133,262	3,323,973 04	117,200	3,069,448 65
Cacao.....	17,285	750,584 72	30	1,315 87
Candles.....	2,677	103,366 94	585	22,581 60
Clothing.....	5,405	1,283,886 00	5,387	1,273,968 87
Clocks and watches.....	71	122,104 30	27	10,816 50
Coal.....	455,887	114,382 02	1,981	497 00
Coffee.....	11,888	418,234 80	5	169 20
Colors.....	8,635	106,029 75	8,571	104,418 95
Cordage of hemp.....	4,704	136,195 10	4,641	134,847 50
Cork wood, finished.....	1,553	125,018 60	1,553	125,018 60
Fat.....	5,524	136,178 70	4,549	112,825 60
Fish, preserved.....	77,130	2,988,053 02	75,920	2,938,098 44
Fruits.....	69,860	913,367 74	69,171	902,660 61
Furniture.....	9,865	95,235 70	9,034	87,179 25
Grains and flour.....	39,165	286,254 70	8,745	40,321 30
Gold and silver.....	144	564,550 50	144	564,528 80
Gums and resins:				
Indigenous.....	36,709	128,533 40	36,705	128,980 30
Exotic.....	6,823	250,202 70	6,670	244,568 80
Haberdasher ware.....	10,693	1,351,022 77	10,607	1,338,006 85
Hats:				
Straw.....	325	226,025 40	325	225,803 05
Felt.....	979	94,184 60	973	93,918 40
Honey.....	5,380	145,361 00	5,380	145,361 00
Jewelry, in gold and silver.....	13	693,846 20	8	298,592 80
Leather work.....	2,500	1,196,534 18	2,437	1,169,638 86
Machinery.....	14,211	543,102 70	3,264	118,937 90
Matting, straw.....	5,430	1,364,245 21	5,418	1,362,831 10
Meats, salted.....	12,293	332,399 00	6,259	161,029 90
Medicaments, compound.....	1,898	104,736 70	1,804	99,242 90
Metals, manufactured.....	17,006	423,967 50	11,621	369,321 70
Oils.....	22,402	504,307 10	18,299	394,507 20
Oysters, fresh.....	3,844	98,908 00	3,844	98,908 00
Perfumery.....	2,461	134,262 40	2,442	133,269 60
Pottery and glassware.....	115,141	791,093 65	112,977	743,995 31
Rags.....	8,619	146,377 20	8,521	144,726 30
Rice.....	18,279	190,595 30	2,791	29,086 60
Seeds.....	8,190	189,675 90	8,189	189,664 00
Skins and hides:				
Undressed.....	22,122	909,367 94	21,651	892,416 75
Prepared.....	1,893	268,310 15	1,818	256,153 00
Soap.....	17,738	188,290 80	17,327	183,890 15
Stationery.....	19,660	578,521 75	18,780	545,930 40
Sugar.....	85,728	1,099,471 01	73,990	983,249 70
Syrups and candies.....	2,535	102,751 65	2,531	102,579 50
Tartrate.....	48,038	1,525,024 43	48,030	1,524,734 75
Thread.....	1,306	107,897 03	639	42,184 60
Tissues of cotton.....	14,790	1,351,849 78	3,855	398,048 41
Tissues of linen.....	2,414	253,402 40	2,287	239,678 60
Tissues of silk.....	198	359,395 90	152	273,060 45
Tissues of wool.....	8,323	2,066,506 78	8,006	1,981,429 29
Tobacco, manufactured.....	1,407	166,139 00	555	64,712 10
Truffles.....	349	202,105 75	349	202,105 75
Vegetables:				
Dried.....	16,638	134,865 10	16,624	134,752 00
Green and preserved.....	41,081	300,729 70	41,033	300,041 30
Willow-work.....	3,862	199,849 53	2,418	124,591 70
Wines.....	1,152,321	17,951,195 57	1,151,270	17,856,723 22
Wood:				
Common.....	1,586,473	690,176 10	1,586,456	689,953 77
Worked.....	12,753	130,772 90	12,731	130,252 40
Wool, in bales.....	5,074	254,610 80	5,073	254,555 60
Articles not elsewhere specified.....	224,302	2,238,741 15	183,927	1,699,653 70
Totals.....	4,426,253	51,772,233 81	3,777,873	46,067,135 29

UNITED STATES CONSUL-AT,  
Bordeaux.

BENJ. GERRISH, JR.

## DUNKIRK.

*Statement showing the imports and exports between Dunkirk and the United States for the year ending June 30, 1879.*

Articles.	Imports.		Exports.	
	Amount.	Value.	Amount.	Value.
Fish-oil.....kilograms..	}	90,308	}	\$13,949
Whale-oil.....do.....				
Wheat.....do.....	79,221,900	3,761,079		
Maize (corn).....do.....	19,876,000	381,024		
Sugar.....do.....	409	43		
Cotton.....do.....	206,800	49,632		
Petroleum.....do.....	9,196,424	198,193		
Fire-wood.....do.....		408		
Sawn timber.....do.....		16,000		
Tissanes.....cases.....			49	\$19,621
Smoking-pipes.....do.....			576	1,283

*Statement showing the exports from Dunkirk for the year ending June 30, 1879.*

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Kilograms.</i>		
Wheat.....	268,900	\$16,134	England, Belgium.
Flour.....	32,700	2,616	Do.
Barley.....	4,408,400	198,702	Belgium.
Rye.....	211,600	7,617	Sweden, England.
Maize.....	369,600	11,333	England.
Oats.....	1,298,200	46,379	Belgium.
Potatoes.....	2,078,149	62,343	England, Belgium.
Dry vegetables.....	1,491,810	87,108	Do.
Sugar.....	28,311,679	3,114,276	England.
Refined sugar.....	90,469	6,992	Do.
Molasses.....	308,978	7,394	Do.
Wool.....	41,918	8,030	Do.
Yarn—			
of flax.....	92,069	26,000	England, Holland.
of jute.....	1,880,420	376,084	Do.
of cotton.....	1,912	1,763	England.
of woolen.....	40,470	40,470	England, Belgium.
Tissanes—			
of flax.....	30,271	60,942	Do.
of jute.....	33,448	10,034	England, Holland.
of cotton.....	30,740	92,220	Do.
of wool.....	190,673	381,336	England, United States.

*Statement showing the navigation at the port of Dunkirk for the year ending June 30, 1879.*

Flag.	ENTERED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
French.....	177		926		1,103	
Russian.....	5		22		27	
Swedish.....	17		27		24	
Norwegian.....	20		25		45	
British.....	703		508		1,301	
German.....	27		78		105	
Dutch.....	39		8		47	
Belgian.....	21		7		28	
Portuguese.....	1		2		3	
Spanish.....	20		3		23	
Austrian.....			17		17	
Italian.....	1		33		34	
Danish.....	27		20		47	
Greek.....			3		3	
American.....			16		16	
	1,058		85		2,843	

*Statement showing the navigation at the port of Dunkirk, &c.—Continued.*

Flag.	CLEARED.					
	Steamers.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
French .....	169	.....	851	.....	1,020	.....
Russian .....	5	.....	24	.....	29	.....
Swedish .....	19	.....	25	.....	44	.....
Norwegian .....	14	.....	91	.....	105	.....
British .....	786	.....	440	.....	1,235	.....
German .....	33	.....	99	.....	132	.....
Dutch .....	42	.....	6	.....	48	.....
Belgian .....	15	.....	5	.....	20	.....
Portuguese .....	.....	.....	3	.....	3	.....
Spanish .....	22	.....	1	.....	23	.....
Austrian .....	.....	.....	14	.....	14	.....
Italian .....	2	.....	30	.....	32	.....
Danish .....	25	.....	21	.....	46	.....
Greek .....	.....	.....	4	.....	4	.....
American .....	.....	.....	15	.....	15	.....
	1,182	.....	1,638	.....	2,770	.....

UNITED STATES CONSULAR AGENCY,  
Dunkirk, October 1, 1879.

H. LEMAITRE.

## HAVRE.

*Report by Consul Bridgland on the commerce and navigation of Havre for the year 1878.*

I have the honor to herewith transmit my annual report respecting trade and navigation at Havre during the year ending December 31, 1878.

Since my last annual report, in which I gave a full description of the port and docks of Havre, accompanied with several plans, there is nothing new to add, other than the works in execution are still being pushed forward with a view to completion. The chief engineer has submitted plans during the last twelve months which will largely increase the work as now laid out, should they be accepted; unless there should be additional railroad facilities between Havre and Paris, the present plans will be quite sufficient for the commerce of this port. There is only a single track of railroad running from here to Paris, and it is in the hands of a monopoly, with rates so much higher than the roads in Belgium leading out of Antwerp that a large proportion of the business for Switzerland and other portions of the continent, that naturally belongs to Havre from its geographical location, goes to Antwerp instead of coming to Havre. It is often that merchandise from our country remains on the quay for weeks, for the want of railroad transportation to Paris and elsewhere. I am satisfied that Havre would double its population in the next twenty years with such railroad facilities as American enterprise would give to commerce, instead of the present management.

## COMMERCE.

The total amount of duties received at the Havre custom-house during 1878 was 34,695,395 francs against the year 1877 of 24,884,496 francs, making an increase in receipts for 1878 of 9,810,899 francs. This of

course is the result, in a measure, of the duty that has been levied upon imports from the United States. The duty now on flour is about 50 cents per barrel, which, I think, is the beginning of an increased duty upon all of our land productions that will be hereafter shipped to France; perhaps cotton and tobacco may be the exceptions.

The following will show the movement of each of the principal articles of trade at Havre during the year 1878:

## COTTON.

	Bales.
Stock on the 31st of December, 1877.....	122, 410
Importations for 1878.....	616, 813
Total .....	738, 223
Sales .....	643, 842
Stock on the 31st of December, 1878.....	94, 381

The falling off of receipts of cotton at this port for 1878 is accounted for by the stagnation in trade with France for cotton goods. Cotton reached during the year a lower price than any time since 1859 and 1860; the crop, the largest one ever produced in the United States. The price to-day at New Orleans is  $11\frac{1}{2}$  against  $7\frac{1}{2}$  at this date 1878.

This great improvement of price is first attributable to our great prosperity and the resumption of business throughout the country. Outside speculators have for some months been investing in cotton and holding it off the market, whilst a large increased demand for cotton tissues has compelled spinners to pay the advanced prices. The past year our own spinners consumed more cotton than in any previous year in our history, and will probably consume 2,000,000 of bales in the cotton year of 1879, which, with a crop of 4,750,000 bales, as has been estimated for the present cotton crop by the Agricultural Bureau at Washington, will leave but 2,750,000 bales for exportation, making no allowance for the usual stock we carry over from one crop to another. I believe at the present high prices cotton occupies a better position than it did last year at the extreme low prices, as the stocks of cotton fabrics have not accumulated in the hands of manufacturers, and the resumption of business at home and abroad will compel spinners to take the remainder of our crop at even higher prices than the present. The dealers in Havre have lost a large amount of money this season by selling cotton "short" or, in other words, for future delivery. The stock of cotton in store and on shipboard in Havre to-day is only about 40,000 bales, against 94,381 bales this time last year.

## WOOL.

	Bales.
Stock on the 31st day of December, 1877.....	11, 632
Importations for 1878.....	105, 314
Total .....	116, 946
Sales .....	104, 614
Stock on the 31st day of December, 1878.....	12, 332

This article contended with a declining market during most of the year without great fluctuations. Manufacturers found it difficult to dispose of their goods at paying prices. There were 93,262 bales imported from La Plata, whilst there were only 12,052 bales from other countries. Wool is sold in this market at public auction four times a year. "As a

rule," manufacturers attend the sales and make their own purchases. French manufacturers buy a great deal of their wool at the Antwerp sales.

## COFFEE.

	Sacks.	Casks.
Stock on the 31st of December, 1877 .....	218, 435	2, 431
Importations for 1878 .....	731, 475	1, 505
Total .....	949, 910	3, 936
Sales for 1878 .....	673, 956	3, 503
Stock on the 31st of December, 1878 .....	275, 954	433

The abundance of the production of coffee in Brazil caused some hesitation in the European markets, and gradually produced a reduction of 20 per cent. in 1878 of prices compared with those of 1877.

## HIDES.

	Hides.
Stock on the 31st of December, 1877 .....	229, 114
Importations for 1878 .....	840, 129
Total .....	1, 069, 303
Sales during the year .....	731, 955
Stock on the 31st of December, 1878 .....	337, 348

The prices at the beginning of the year for dry La Plata hides were 140 francs per 50 kilograms, duty paid; for green salted hides, from 65 to 84 francs per 50 kilograms, duty paid; Lima hides, from 54 to 62½ francs per 50 kilograms, duty paid; horse-hides, 95 francs per 50 kilograms, duty paid. The transactions were very limited, without great fluctuations, the old stock being in little demand, whilst the new stocks were sold on landing at better prices than at the end of the year 1877.

About the 15th of March the markets continued very quiet, and merchants were in fear that should additional arrivals appear prices would continue to go lower. From the 1st of June the markets were more active, there being an increase in prices which continued until the 1st of August, when it became very active. From this time to the end of the year no changes of importance took effect, except with dry La Plata hides, in which there was marked decline.

Included in the above table are 43,756 horse-hides of stock in 1877, the importations for same in 1878 being 14,982. The sales for 1878 were 39,664, leaving a stock of 19,074 hides at the end of 1878.

## RUM.

	Casks.
Stock on the 31st of December, 1877 .....	2, 663
Importations for 1878:	
Martinique .....	10, 975
Guadeloupe .....	2, 053
Total .....	15, 691
Sales during 1878 .....	12, 155
Stock on the 31st of December, 1878 .....	3, 536

The price at the end of the year was 11 cents per wine quart, duty paid.

## INDIGO.

This market in indigo for the year 1878 grew to considerable importance, which is shown by an increase in receipts of 6,068 packages compared with 1877. The sales were 8,576 cases against 2,520 cases for the year 1877. These exceptional and principal importations, "Tirhoot," met with quick sale; consequently, our stock at the end of the year was only composed of 2,267 cases of Bengal and 63 cases from divers countries.

The following is a list of importations by countries:

Countries.	Cases in 1878.	Cases in 1877.
Bengal .....	8,081	2,598
Kurpha, Bombay, and Madras .....	19	
Java .....	35	
Guatemala .....	1,188	607
New Granada .....	45	
Venezuela .....	23	68
Total .....	9,341	3,273

Increase of importations for 1878, 6,068 cases; increase of sales for 1878, 775 cases.

Prices on the 31st of December, 1878, were—

	Francs per pound.
Bengal superfine violet blue .....	11 25 to 11 75
Bengal superfine purple violet .....	11 00 to 11 25
Bengal good purple violet .....	10 25 to 10 75
Bengal good violet .....	7 00 to 8 25
Bengal good red violet .....	8 50 to 9 00
Bengal fine red .....	8 25 to 9 00
Bengal, from good to fine copper color .....	5 00 to 6 75
Java .....	5 00 to 11 50
Kurpha .....	3 00 to 7 50
Caraque .....	1 50 to 7 00
Guatemala .....	1 50 to 8 50
Madras .....	1 50 to 4 50
New Granada .....	5 50 to 12 00

## SUGAR.

During the year 1878 there were imported into this port 382,303,124 pounds of sugar, of which 195,205,042 pounds of raw, 12,356,823 pounds of white powdered, and 2,239,828 pounds of refined were imported from the French colonies, 176,666 pounds were imported from Belgium, and 172,324,765 pounds from other countries. There were 87,187,114 pounds of molasses imported from Belgium, 54,301,624 pounds from Germany, and 35,608 pounds from other countries. The duties collected at the custom-house on sugar for the year 1878, were 169,342,000 francs, and on glucose 2,061,000 francs. The prices for 1878, duty paid, were—

Per pound, good fourth:	Cents.
Martinique and Guadeloupe .....	10½ to 10¾
Porto Rico and Cuba .....	10½ to 10¾
Bourbon Islands .....	11½ to 11¾
Mauritius .....	11½ to 11¾

*Exportations of sugar for the year 1878.*

## REFINED.

	Pounds.
England .....	201,348,895
Belgium .....	3,493,727
Russia .....	9,541,034

Sweden .....	4, 132, 099
Austria .....	1, 709
Italy .....	6, 063, 785
Switzerland .....	30, 609, 101
Greece .....	702, 225
Turkey .....	16, 437, 570
Egypt .....	9, 338, 062
Bombay States .....	8, 866, 501
Uruguay .....	4, 174, 878
Argentine Republic .....	10, 737, 808
Chili .....	13, 903, 551
Algeria .....	19, 170, 450
Other countries .....	28, 050, 580
	<hr/> 366, 571, 975

*Molasses exported.*

	<b>Pounds.</b>
Belgium .....	8, 811, 713
Norway .....	2, 078, 945
Sweden .....	509, 344
Other countries .....	2, 609, 972

Unlike the custom in the United States, estimating the quantities of molasses by gallons, it is estimated here by weight.

Foreign raw sugars imported into France, to a large extent, are mixed and refined with the native beet sugar. The amount of raw sugar exported, after having been refined in France, is 478,910,587 pounds.

*Table of the movement of sugar for 1878.*

	<b>Pounds.</b>
Foreign :	
Quantities on which duties were paid .....	107, 024, 796
Quantities bonded .....	62, 608, 482
Colonial :	
Quantities on which duties were paid .....	119, 029, 959
Quantities bonded .....	81, 881, 273
Native or French :	
Quantities on which duties were paid .....	325, 121, 614
Quantities bonded .....	368, 281, 522
Stocks in bonded warerooms and manufactories :	
Foreign .....	5, 398, 800
Colonial .....	21, 464, 300
Native or French .....	457, 080, 800
Total .....	<hr/> 483, 943, 900

**PETROLEUM.**

	<b>Barrels.</b>
Importations for 1877 .....	235, 000
Importations for 1878 .....	113, 378
Decrease for 1878 .....	<hr/> 121, 622

Petroleum passes through in transit, and is not considered one of the staples of this market.

**WHEAT.**

	<b>Bushels.</b>
Importations for 1878 .....	10, 855, 031
Importations for 1877 .....	1, 230, 323
Increase for 1878 .....	<hr/> 9, 624, 708

*Prices in December, 1878, duty paid.*—California from \$1.44 to \$1.80 per bushel. Other States, from \$1.47 to \$1.58 per bushel.

Because of the failures of crops of cereals in Europe during the years 1877 and 1878, the importations were largely increased, while France was an exporter most of the time for twenty years before, and but for the three consecutive comparative failures in Europe, including the years 1877, 1878, and 1879, with the three largest crops, consecutive or otherwise, ever produced in the United States, our wheat would hardly have paid



its transportation from the farms in the far West to the consumers in Europe. On the other hand, but for the great consecutive crops, including the one of this year in our country, there would have been a bread famine to-day almost all over Europe. With an increase of 33 per cent. of our lands put under the plow, as has been the case in the last seven years, should that increase continue, with such productions as we are now having, I cannot conceive in what way our farmers are to get rid of their surplus, at paying prices, when the farmers of Europe are again blessed with full crops. It is to be hoped, however, that our farmers will all get out of debt before that time comes.

## MAIZE.

	Bushels.
Importations for 1878 .....	1,908,856
Importations for 1877 .....	983,750
Increase for 1878 .....	925,106

The price for this article for December, 1878, duty paid, was from 76 to 81 cents per bushel. As will be shown in this report, there was a large increase over 1877 in the receipts of American corn at this port, which was the result, in some degree, of an earnest effort upon my part to introduce this great staple of our country as a food for man and beast, but unfortunately the want of care, on our side, in preventing the use of false local inspectors' certificates as to grade and condition has done much to destroy this trade. Ship-load after ship-load arrived at this port in almost a rotten condition, which made much of the grain unfit for anything other than fertilizer for lands. This, of course, involved upon importers severe losses, and caused them to be disgusted with the traffic, so that this year of 1879 we have only received at this port 8,631,718 kilos, against 40,397,750 kilos of last year. I therefore repeat my statement in my last annual report that some steps should be taken by our government to prevent these fraudulent shipments, and if by no other means, the appointment of experts at our most important custom-houses, with an ample salary, and large bond, and for every fraudulent certificate issued by them, they should be held responsible, under their bond, for all damages thus sustained, and be imprisoned for not less than six months nor more than two years, unless some better plan can be adopted for the protection of our exports. There is scarcely anything produced in our country that is not first class in quality that is worth the importation to Europe. Sour corn can be consumed at home by our distilleries at almost the same price of sound corn, and there is no reason for shipping it except to benefit dishonest shippers, who can buy it for something less than corn in sound merchantable condition. In fact it is worth more in our distilling districts than it is worth in Havre, because it is worth something for distilling purposes at home and worth nothing for feeding purposes here.

## HOG PRODUCT.

Salted American pork and bacon are being consumed in this country more and more every year, and the importations during the last four years have more than doubled themselves. Importations were as follows:

	Kilos.
1875 .....	2,242,000
1876 .....	5,409,700
1877 .....	12,324,400
1878 .....	33,734,367

The last figures do not include 386,650 kilos of salted meats other than pork.

The importations of lard for 1878 were 88,428 tierces, 5,421 firkins, 29,957 tubs, and 1,794 boxes, at prices at the beginning of the year of 11 cents per pound, and at the end of the year, December 31, 1878, 9 cents.

The price of shoulders at the beginning of the year was 7 cents per pound; June 30,  $6\frac{1}{2}$  cents per pound, and December 31,  $5\frac{1}{2}$  cents per pound.

Long sides sold at the beginning of the year for 9 cents; June 30, at 8 cents, and December 31, at 7 cents per pound. Short sides sold at the beginning of the year for  $9\frac{1}{2}$  cents; June 30, 8 cents, and December 31,  $7\frac{1}{2}$  cents per pound.

The increase in the importation of the hog product caused a fall in prices, but increased again before an active and regular demand; as the arrivals became more frequent the prices closed at the end of the year with considerable reduction. There has been a strenuous effort made on the part of land owners and farmers in France during the past year to have placed upon foreign meats and lard a high protective tariff. In fact, a committee has been appointed by the French Government to investigate scientifically the effect produced upon the consumers of the American hog product as a sanitary measure. I do not think the French Government will dare to place a high duty on, as all duties are paid by consumers; the people of France are too free to-day to permit land-owners to place upon them high-priced meat and bread from their own lands, when they can get cheap meat and bread from other parts of the world. With the present deficiency in France of the native production of this article, there would be a famine, and a famine means revolution.

#### NAVIGATION.

During the year 1878 there entered and cleared from the port of Havre 521 French steamers, of a total tonnage of 500,740 tons, which shows an increase over 1877 of 19 vessels and 25,418 tons.

Of French sailing ships there entered and cleared during 1878, 572 vessels, of a total tonnage of 194,259 tons, showing a decrease of 109 vessels and 44,565 tons compared with 1877.

The total number of French steamers and sailing vessels which arrived with cargoes were 539, of a total tonnage of 351,465, against 573 vessels and 347,214 tons of 1877, making a decrease of 34 vessels and an increase in tonnage of 4,431 tons.

There were 3,286 French coasting vessels, of a total tonnage of 308,547 tons, which entered this port during the year 1878, against 2,982 vessels of a tonnage of 261,797 tons, showing an increase for the year 1878 of 304 vessels and 46,750 tons, which are in addition to the above statements.

In 1878, 3,146 foreign steamers, of a tonnage of 2,029,975 tons, against 2,602 steamers, of a total tonnage of 1,606,362 tons, arrived and cleared at the port of Havre, showing an increase of 544 steamers and 423,613 tons for the year 1878.

Of foreign sailing which arrived and cleared during 1878, numbering 2,090, of a total tonnage of 992,374 tons, against 1,781 vessels of 805,846 tons of 1877, shows an increase for the year 1878 of 309 vessels and 186,528 tons.

Russia shows a decrease of 5 ships and 1,712 tons, and Germany 6 ships and 1,324 tons, whilst the English, Swedish, Norwegian, Danish,

Dutch, Belgian, Spanish, Austrian, Italian, and the United States all show an increase, which are as follows:

*Increase for the year 1878.*

Nationality.	Ships.	Tons.
English .....	198	194,367
Swedish .....	36	13,005
Norwegian .....	29	14,533
Danish .....	25	2,262
Dutch .....	7	914
Belgian .....	23	28,332
Spanish .....	25	15,289
Austrian .....	11	6,126
Italian .....	40	22,898
United States .....	11	14,673

The movement of navigation, which in 1877 presented a decrease of 445 vessels and 40,654 tons on the corresponding movement of 1876 (total entries and sailings united), again took in 1878 an upward movement, giving an increase of nearly one-sixth of the tonnage of 1877, and of more than one-eighth on the number of vessels, as per following statement:

In 1876, 11,993 vessels and 3,696,195 tons; in 1877, 11,548 vessels and 3,655,541 tons; in 1878, 12,949 vessels and 4,341,305 tons. Increase for 1878 above 1877, 1,401 vessels and 685,764 tons.

This increase of maritime movement outside of the coasting trade is produced entirely in favor of foreign flags, and that, far from maintaining even in the feeble proportion of 22.84 per cent. what it possessed in the corresponding tonnage of 1877, the French flag has fallen in 1878 down to 18.70 per cent., while foreign flags had their proportion increased from 77.16 per cent. in 1877 to 81.30 per cent. in 1878.

#### BRITISH AND AMERICAN NAVIGATION.

I was kindly furnished by the English consul with a statement of the sailings of British steamers and sailing vessels for the years 1877 and 1878, which are as follows:

In 1878, steamers, 899; tonnage, 546,651. In 1877, steamers, 774; tonnage, 409,473. Increase for 1878, steamers, 125; tonnage, 137,178.

Sailing vessels: for 1878, 533 vessels, 259,281 tons; for 1877, 460 vessels, 202,092 tons; increase for 1878, 73 vessels and 57,189 tons.

And by way of comparison I give the arrivals and departures of American sailing ships, which is rather a bad comparison for our mercantile marine:

For 1878, 108 ships and 100,540 tons; for 1877, 97 ships and 85,867 tons. Increase for 1878, 11 ships and 14,673 tons.

With this showing it is easy to see who is doing the carrying trade at the expense of the United States. I hope that our government may offer every possible inducement to our ship-builders to build iron steamships to take the place of wooden sailing ships, that have become the stage-coaches of the seas in modern times, for it cannot be long until the flag of our country will become a curiosity in the ports of Europe unless we have this change.

J. A. BRIDGLAND.

UNITED STATES CONSULATE,  
*Havre, December 11, 1879.*

*Statement showing the navigation, by flag, at the port of Havre during the year 1878.*

Flag.	ENTERED.				CLEARED.			
	Laden.		In ballast.		Laden.		In ballast.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
French .....	2, 203	597, 256	661	74, 366	3, 450	565, 359	399	81, 965
Russian .....	22	8, 635			6	2, 305	17	6, 338
Swedish .....	133	53, 848	3	1, 259	63	24, 848	73	29, 689
Norwegian .....	282	114, 883			35	14, 210	239	96, 414
Danish .....	72	29, 205			19	5, 070	56	25, 276
English .....	1, 432	805, 932	64	9, 362	717	307, 699	789	495, 002
German .....	222	260, 087	2	387	140	225, 866	85	36, 509
Dutch .....	77	18, 290			70	17, 366	7	2, 407
Belgian .....	26	30, 520			21	22, 486	9	8, 618
Portuguese .....	29	9, 969			82	10, 725		
Spanish .....	57	26, 829			43	22, 290	13	4, 061
Austrian .....	31	16, 002			1	299	25	12, 799
Italian .....	66	34, 561			1	203	58	30, 762
Greek .....							1	344
American (United States) .....	108	100, 540			4	3, 406	105	96, 201
Sundry .....	1	847						
Total .....	5, 761	2, 107, 404	730	85, 874	4, 602	1, 222, 132	1, 856	926, 385

Statement showing the navigation, by countries, at the port of Havre for the year 1878.  
ENTERED.

Countries.	LADEN.			IN BALLAST.		
	French flag.		Foreign flag.		French flag.	
	No.	Tonnage.	Men.	No.	Tonnage.	Men.
Countries in Europe: WHENCE ARRIVED.						
Russia.....	8	1,022	66	189	97,731	2,904
Sweden.....	2	393	16	188	70,083	2,400
Norway.....	1	278	9	59	18,631	841
Denmark.....	37	13,011	404	5	88	
England.....	60	32,230	1,261	941	397,061	20,261
Germany.....	56	20,728	969	120	178,230	8,127
Holland.....	5	2,023	102	56	13,198	1,120
Belgium.....	54	27,674	1,172	24	25,122	837
Portugal.....	5			28	9,968	633
Spain.....	58			42	21,802	920
Austria.....	2	609	20	5	3,897	114
Italy.....				6	2,225	75
Turkey.....				11	8,842	228
Countries beyond Europe:						
Egypt.....	7	1,880	74	8	7,598	204
West coast of Africa.....	1	272	12	44	10,907	410
British Possessions in Africa.....	7	3,839	110	1	389	13
British Possessions in India.....				27	24,083	594
Dutch Possessions in India.....				19	12,800	280
Australia.....				8	5,919	125
Other islands of Oceania.....	2	949	32			
United States.....	66	121,560	6,090	471	387,290	8,254
Mexico.....	27	8,089	329	19	5,762	185
Guatemala.....	3	1,504	47	1	613	14
New Granada.....	14	17,631	1,018	16	25,633	897
Venezuela.....	1	257	10	5	853	36
Brazil.....	36	27,488	930	64	47,152	1,937
Uruguay.....	10	10,548	317	22	11,690	363
Rio de la Plata, Buenos Ayres.....	11	13,407	367	53	39,917	1,237
Ecuador.....	1	380	14			
Peru.....	4	2,334	67	17	19,207	359
Chili.....	1	675	19	11	12,090	389
Hayti.....	68	24,947	919	52	27,054	902
St. Thomas.....				1	2,190	69
Spanish-American Possessions.....	1	508	17	10	3,115	116
English-American Possessions.....	4	1,089	46	23	12,171	332

[illegible]

## LA ROCHELLE.

*Report, by Consul Catlin, on the trade and industries of La Rochelle, for the year ending June 30, 1879.*

In compliance with the provisions of paragraph 380, Consular Regulations, I have the honor to transmit herewith returns of imports, exports, and navigation in this consular district for the year ending June 30, 1879, as per Forms 127, 128, and 129.

## IMPORTS AND EXPORTS.

From these returns it will be noted—

1st. That the value of exports exceeds that of imports by \$871,308.40.

2d. That 96 per cent. of the year's exports are brandies. Of these, about one-eighth part, valued at \$952,690.66, were shipped to the United States.

3d. That of the imports, upward of 40 per cent. consists in wheat, 25 per cent. building-wood, and 16 per cent. coal.

4th. That only five United States ships, representing an aggregate tonnage of 2,140 tons, entered during the year. None of these, it may be added, came to La Rochelle. They entered either at Rochefort or Tonnay-Charente, which are included in this customs as well as in this consular district.

5th. That no porcelain shipments are reported (Limoges porcelains being ordinarily shipped via Havre or Bordeaux), but that 880 tons of potters' clay were imported from England.

6th. That 3,555 hogsheads of alcohol were imported from Germany.

7th. That Spain furnished 57,876 tons of iron ore, 3,103 hogsheads of wines, and 30,380 gallons of olive oil. This is due to the facilities offered by two lines of steamers running regularly between this port and Bilbao. The iron goes principally to the Creuzôt Iron Company, the wine to Paris, or for local consumption, and the olive oil to the sardine factories.

8th. That a trade in oranges and lemons from Spain was begun with a view to delivering those fruits fresh in Paris, via this port, within thirty hours after being gathered. Nearly \$30,000 worth of fruit was so delivered last season. The passage hither by steamer for Bilbao requires, say, twenty hours, the passage by rail to Paris 10 hours more.

9th. That other to the amount of 122 tons was exported to the United States. No declaration of such shipments having passed through the consulate, I found upon inquiry that it was shipped as ballast on two vessels (English and Norwegian), under the captains' names. I there-upon forwarded the facts to the collector of customs at New York, to which port both vessels had cleared, that measures may be taken to enforce in each case a compliance with the Treasury Regulations, which it appears have clearly been violated by the captains in question.

The declared exports from this consular district to the United States, during the year ending June 30, 1879, may be summarized as follows, viz:

Brandy .....	\$952, 690 66
Porcelains .....	485, 930 76
Paper .....	5, 344 06
Sardines .....	5, 133 80
Vinegar .....	2, 390 86
Total .....	1, 451, 490 14

## THE PHYLLOXERA.

This pest constantly advances, attacking new territory and leaving only ravaged vineyards behind him. Without giving a great mass of irrelevant details which are published in the press and elsewhere in relation to this subject by advocates of conflicting theories, it may in brief be stated that three years hence, according to present indications, there will not remain in this department a single vineyard not overrun. The consternation occasioned among the vine-growing peasantry by the contemplation of this stern fact gives rise to an endless variety of arguments, theories, remedies, and projects for the preservation of their vineyards. A traveler recently making a trip through the neighboring province of Poitou chanced upon a vineyard where he saw tied by a string to the root of each vine a small square tin plate glistening in the sun. Stooping to make a closer examination, what was his surprise to find each plate decorated with a bleeding heart, a crown of thorns surmounted by a cross, and inscribed in red ink with the words, "*Arrête ! Le cœur de Jesus est avec nous.*" The superstitious proprietor had gone to the expense of attaching one of these plates to every vine in his vineyard in the hope and belief that it would prove an efficacious interdiction to the phylloxera. I mention the circumstance as aptly illustrating the feeling of desperation which prevails in the rural regions on this subject.

In some regions, notably the Côte d'Or (Burgundy), an active opposition has developed itself to the use of insecticides (sulphuret of carbon) as a means of opposing the phylloxera, notwithstanding ministerial instructions to that effect. Near Dijon, it is said, some government agents, sent to treat the vines by this process, were driven off by force by a crowd of fifty villagers, who subsequently assembled daily at the sound of a drum to repel any further attempts that might be made. These rebellious vine-growers assert that the employment of sulphuret of carbon not only destroys the phylloxera, but at the same time practically destroys the vines themselves for several years to come. In short, it may be said that, notwithstanding its indorsement by the government, the treatment of vines by insecticides is generally unpopular and practically falling into disuse. It begins now to be generally conceded that the only salvation for French vineyards rests in the importation of certain American vines which, as mentioned in my dispatch No. 33, dated February 25, 1879, resist the phylloxera by the thickness of their fiber, and, at the same time, when having a French vine grafted upon them, yield a quality of wine absolutely as good as do the French vines themselves.

The movement in favor of procuring these vines, notably those known as the "Jacquez" and the "Herbemout," which have been found by the phylloxera commission to resist perfectly, is very general and eager, and small lots already imported have been sold at very high prices.

Owing to a general complaint among the rural vine-growers that none of these vines were to be had, the prefect of this department, at the meeting of the council-general in August last, asked an appropriation of 4,000 francs for the establishment of a nursery of American vines at Saintes, a central point. The proposition, though warmly urged by the prefect and M. C. Comte Le Mercier, president of the phylloxera commissions, was rejected by a strictly partisan vote, and that for the present ended it. The demand for American vines nevertheless continues, and I have taken measures to bring those who may desire to purchase them in communication with reliable parties in the United States.



It is none too soon; even if American vines are generally introduced next year, there will probably be a gap of a year or two before they can bear, and during which period little or no grape crop of any kind can be looked for.

#### THE VINTAGE OF 1879.

This year's wine crop, owing to the incessant rains and the cause previously cited, will be the poorest that has been made for many years past. Estimates as to its quantity vary widely, some saying that it will not reach over one-fifth of what is known as a full crop, while the most sanguine do not anticipate over half a crop.

Under these circumstances the rise in prices is not surprising. Ordinary red wine has advanced fully 25 per cent. during the last twelve months, and is still advancing. Brandy that a year ago sold at 210 francs the hectoliter now sells at 260, and may rise to a much higher figure.

#### SPURIOUS BRANDY.

I have nothing further to add to the report forwarded the Department in my dispatch No. 49, dated August 4, 1879, on the subject of large quantities of spurious brandy being in circulation other than to say that I have since applied to the city chemist here to learn whether up to the present time any chemical test has been discovered for detecting the spurious brandy or distinguishing it from genuine grape brandy. His answer was an unqualified negative.

#### AMERICAN WHEAT.

The planting of wheat in the ravaged vineyards has not found general favor. This is not remarkable, however, in view of the fact that a hectoliter of wheat cannot be raised here for less than 18 francs, while it is estimated that American wheat can this year be delivered in store here at 14 or 15 francs the hectoliter.

Great preparations are being made for the receipt of the large quantities of grain which will undoubtedly find their way from the United States to this city and Rochefort during the present fall and coming winter. One shipping-house of La Rochelle already talks of sending a 1,700-ton steamer to New York for a direct cargo. In this connection it may be added that several consignments of agricultural machines and implements from the United States have been received here during the past year, and that at the last meeting of the agricultural society of La Rochelle the gold medal was awarded to the McCormick reaper of Chicago, which easily won it over all other competitors.

#### THE PORT OF LA ROCHELLE.

Referring to my dispatch No. 47, dated July 10, 1879, relating to the new and extensive harbor for sea-going vessels projected at this point, I have the honor to inclose a description of the work as officially presented to the French Senate, published in the *Travaux Publics*,\* and

---

\* PORT OF LA ROCHELLE, September 1, 1879.

With a view to the correction of certain errors existing in several of the published documents ordinarily consulted by ship captains—errors which relate chiefly to the draught of water with which vessels can enter the port of La Rochelle, and to the depth of water in the docks, and which are to be attributed to the fact that said publications are of ancient date—the Chamber of Commerce of La Rochelle believes it to

thence recopied into the *La Rochelle Courier* of September 3, 1879. Public interest in the subject continues unabated, and the Chamber of Commerce have already published for circulation in foreign ports the circular of which I inclose a copy, calling attention to the advantages which La Rochelle offers to shippers. The new port will, as far as can be foreseen at the present time, be begun early during the coming year. In connection with this great enterprise, a spirit of awakening seems to have taken possession of the people. Their city no larger to-day, either in area or population, than it was two centuries ago, is all at once found to be inadequate to the demands of the coming era of commercial prosperity which the new port is to bring about. An active movement, in the form of a petition to the French Congress, is accordingly on foot, to demolish the heavy stone fortifications, and to fill up the ditches which up to the present time have hemmed in the city's growth, and thereby allow it to spread out in new streets, avenues, and wards over the adjacent pasture-grounds and meadows.

The fortifications which were constructed in 1684 by Vauban, the great French engineer, are utterly useless against modern artillery, and might well be dispensed with to afford the city room for modern growth. The augmented value of certain parcels of land in the suburbs, owned by the government, would, it is urged, amply indemnify it for the expense of demolition.

#### THE PORCELAIN TRADE.

The porcelain trade of Limoges during the past year has shown a decided revival. The value of porcelains shipped to the United States

be its duty to call the attention of ship captains, ship-owners, brokers, and shippers of merchandise to the following facts, viz:

The port of La Rochelle is situated on the west coast of France, opposite the east end of the isle of Ré, in lat. 46.12 N., and long. 4.40 W. of Paris. Two fixed lights, visible nine miles distant, mark the channel of entrance.

The port consists of an inner harbor, an interior dock and a still larger exterior dock, outside of which is an outer port, where loaded vessels can be grounded on a very soft mud bottom. The gate of the latter dock, chiefly intended for foreign cargoes, is 16 meters 80 cent. (55 feet) wide and there are rails laid along the quays, affording communication with the different lines of railways. This dock may accommodate vessels of heavy tonnage (1,500 to 2,000 tons loaded); *at neap tide ships drawing 16, 112 English feet, and at spring tide those drawing 20 to 21 English feet, can enter.* This dock is provided with numerous cranes, most of them worked by steam; there are also a careening quay 90 meters long, fresh water hydrants, facilities for ballasting, and other conveniences.

The port of La Rochelle has also a gridiron (free) accommodating ships of 65 meters keel (200 English feet about), shops and shipyards for the construction and repair of vessels and steam-engines, tow-boats, and direct steamer communication with the isles of Ré and Oleron, Nantes, Bourdeaux, Spain, and England. The use of fires and lights is freely allowed on board of vessels and without charge.

Exceptionally well situated, with the safest roadsteads in the Bay of Biscay, the port of La Rochelle is of *very easy access*, being subject to no other expense than pilotage, which for coming in or going out varies from 38 to 140 francs according to draught, but which can never exceed the latter figure even for vessels of the heaviest tonnage; a reduction of one-half is made for steamers, and the employment of small-boats is optional. Pilotage is controlled by government. Ships can come to the roadsteads with all weather.

The trade of the port of La Rochelle consists principally in the receipt of coals, ores, lumber, salt-fish (brought from the Fishing Banks), guano, petroleum, &c. Both the importation and exportation of cereals figure largely; and many other kinds of merchandise, destined both to the interior and the east of France, pass through the port. The wines and brandies produced in the vicinity also give rise to an extensive commerce.

La Rochelle has a population of about 20,000 inhabitants. There are an exchange, a tribunal, and a chamber of commerce, a bonded warehouse, numerous commission merchants and important ship-owners, ship-brokers qualified as interpreters, and consular representatives of all the principal powers.

was as previously stated \$485,930.76, which is larger than any previous year since 1875.

### METEOROLOGICAL STATISTICS.

In compliance with instructions conveyed in department circular dated April 3, 1879, I transmit herewith reports of the humidity of the atmosphere, and other meteorological statistics taken at the observatories in this consular district.

I inclose also, as of possible interest in the same connection, an account of a disastrous cyclone which swept over this section of France on the 20th of February last.

GEORGE L. CATLIN.

UNITED STATES CONSULATE,  
*La Rochelle, September 15, 1879.*

*Statement showing the imports at La Rochelle for the year ending June 30, 1879.*

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
Alcohol.....hhds.	3,555.29	\$117,923 00	\$29,474 57	Germany.
Clay, potters'.....tons	880.14	8,646 40		England.
Coal.....do.	198,324.24	1,173,764 50	46,763 13	Do.
Cod and mackerel roes.....do.	41.78	5,018 00		St. Pierre, Miquelon, and Banks.
Codfish, dried and salted.....do.	3,912.55	371,332 00		Do.
Coffee.....do.	21.58	19,300 00	6,761 94	England, Holland, Guayra, Brazil, Hayti.
Coke.....do.	711.10	2,895 00	167 71	England.
Fruits, lemons & oranges.....do.	278.57	27,367 40	1,094 69	Spain.
Guano.....do.	1,605.00	100,977 60		Peru and Martinique.
Ice.....do.	265.90	2,509 00		Norway.
Iron:				
In bars.....do.	227.84	7,160 30	2,686 17	England.
Cast.....do.	2,062.09	56,742 00	8,103 68	Do.
Ore.....do.	57,876.25	102,483 00		Spain.
Lime.....do.	819.02	6,465 50		England.
Manures, other than guano.....tons.	2,642.71	145,906 20		Do.
Oak staves.....	1,357,181.00	7,855 10	58	Germany, Austria, and United States.
Oats.....tons.	316.45	13,066 10		England.
Oil:				
Fish.....gallons	62,319.04	67,550 00	102 48	St. Pierre, Miquelon, and Banks.
Olive.....do.	30,380.46	53,302 74	799 59	Spain.
Rye.....tons.	1,533.83	60,273 90		Russia.
Salt.....bushels.	36,825.80	4,825 00	208 44	Algeria, England, and Fish-ing Banks.
Sugars, raw.....tons.	37.91	8,935 90	4,958 17	England and the French Colonies.
Tar, mineral.....do.	8,687.91	20,496 60		England.
Wheat.....do.	54,278.47	2,986,366 20	66,553 15	United States, England, Germany, Sweden, and Denmark.
Wine, in casks.....hhds.	3,103.32	77,200 00	6,000 94	Spain.
Wood, for building.....cu. ft.	1,827,928.08	1,814,016 65	31 45	United States, Germany, Sweden, and Norway.
Total.....		7,261,378 09	173,706 68	

Statement showing the exports from La Rochelle for the year ending June 30, 1879.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Barley ..... tons.	1,333.85	\$52,418.80	England and Belgium.
Brandy:			
In casks..... hhds.	60,263.77	4,829,483.39	United States, England, Germany, and Australia.
In bottles..... quarts.	5,980.096	3,047,470.00	
Hay and fodder ..... tons.	111.05	4,361.80	England.
Grain for sowing ..... do.	41.73	4,516.20	Do.
Ochres ..... do.	122.47	1,524.70	United States.
Salt ..... 50 bushels.	15,021.6	3,294.51	Norway, Spain, St. Pierre, and Miquelon.
Sardines ..... tons.	59.28	20,496.60	United States, England, and Australia.
Vegetables, dried ..... do.	1,310.21	48,339.68	England.
Vinegar ..... hhds.	303.46	5,031.51	United States, England, and Germany.
Wine:			
In casks ..... do.	3,460.98	60,273.90	England, Germany, Holland, and Australia.
In bottles..... quarts.	35,086	7,662.10	
Wood for building..... cubic feet.	158,075.75	49,813.30	England.
Total .....		8,132,686.49	

28 C R—VOL II

Statement showing the navigation at the port of *La Rochelle* for the year ending June 30, 1879.

Flag.	From or to—	ENTERED.				CLEARED.			
		Steamers.		Sailing vessels.		Steamers.		Sailing vessels.	
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
French.	Spain.....	73	80,597	7	688	92	40,977	60	7,601
	England.....	22	10,615	150	16,582	1	104	108	16,188
	Germany.....	6	2,519	1	294	...	...	4	438
	Russia.....	...	...	6	855	...	...	...	...
	Norway.....	...	...	...	...	...	...	...	...
	Portugal.....	...	...	...	...	...	...	...	...
	Holland.....	...	...	...	...	...	...	...	...
	Sweden.....	...	...	...	...	...	...	...	...
	Belgium.....	...	...	...	...	...	...	...	...
	United States.....	...	...	...	...	...	...	...	...
Swedish.	Cochin-China.....	...	...	...	...	...	...	...	...
	Martinique.....	...	...	...	...	...	...	...	...
	Algeria.....	...	...	...	...	...	...	...	...
	Senegal.....	...	...	...	...	...	...	...	...
	Banks of Newfoundland.....	...	...	...	...	...	...	...	...
	Sweden.....	...	...	...	...	...	...	...	...
	Portugal.....	...	...	...	...	...	...	...	...
	England.....	...	...	...	...	...	...	...	...
	Germany.....	...	...	...	...	...	...	...	...
	United States.....	...	...	...	...	...	...	...	...
United States.	Martinique.....	...	...	...	...	...	...	...	...
	Canada and Newfoundland.....	...	...	...	...	...	...	...	...
	United States.....	...	...	...	...	...	...	...	...
	England.....	...	...	...	...	...	...	...	...
	Canada and Newfoundland.....	...	...	...	...	...	...	...	...
	Norway.....	...	...	...	...	...	...	...	...
	Sweden.....	...	...	...	...	...	...	...	...
	Denmark.....	...	...	...	...	...	...	...	...
	Russia.....	...	...	...	...	...	...	...	...
	Spain.....	...	...	...	...	...	...	...	...
Norwegian.	England.....	...	...	...	...	...	...	...	...
	Portugal.....	...	...	...	...	...	...	...	...
	United States.....	...	...	...	...	...	...	...	...
	Banks of Newfoundland.....	...	...	...	...	...	...	...	...
	Spanish possessions.....	...	...	...	...	...	...	...	...
	England.....	...	...	...	...	...	...	...	...
	Russia.....	...	...	...	...	...	...	...	...
	Portugal.....	...	...	...	...	...	...	...	...
	Spain.....	...	...	...	...	...	...	...	...
	England.....	...	...	...	...	...	...	...	...
Russian.	Portugal.....	...	...	...	...	...	...	...	...
	Spain.....	...	...	...	...	...	...	...	...
	England.....	...	...	...	...	...	...	...	...
	Portugal.....	...	...	...	...	...	...	...	...
	United States.....	...	...	...	...	...	...	...	...
	Banks of Newfoundland.....	...	...	...	...	...	...	...	...
	Spanish possessions.....	...	...	...	...	...	...	...	...
	England.....	...	...	...	...	...	...	...	...
	Russia.....	...	...	...	...	...	...	...	...
	Portugal.....	...	...	...	...	...	...	...	...

Danish	Sweden.....	1	570	1	570	1	608	1	608
	United States.....	6	4,446	6	4,446	3	2,438	3	2,438
	Canada and Newfoundland.....	5	810	5	810	1	572	1	572
	Denmark.....	3	690	3	690	1	295	1	295
	Russia.....	1	62	1	62	1	178	1	178
	Sweden.....	5	789	5	789	5	789	5	789
	England.....	1	62	1	62	1	62	1	62
	Germany.....	1	126	1	126	1	126	1	126
	Belgium.....	1	239	1	239	1	239	1	239
English	United States.....	235	95,868	235	103,410	25	3,235	123	38,411
	England.....	2	1,011	2	1,011	1	100	1	100
	Russia.....	1	250	1	250	1	100	1	100
	Germany.....	1	808	1	808	1	100	1	100
	Holland.....	2	3,005	2	3,005	2	1,080	2	1,080
	Portugal.....	8	5,822	8	5,822	8	2,118	8	2,118
	Spain.....	1	792	1	792	1	3,947	1	3,947
	Australia.....	1	792	1	792	1	1,220	1	1,220
	United States.....	11	2,974	11	2,974	11	1,277	11	1,277
	Ranks of Newfoundland.....	11	2,974	11	2,974	11	1,277	11	1,277
German	Sweden.....	2	716	2	716	2	1,277	2	1,277
	England.....	1	214	1	214	1	248	1	248
	Portugal.....	1	288	1	288	1	104	1	104
	Austria.....	2	1,021	2	1,021	2	1,208	2	1,208
	Spain.....	1	149	1	149	1	3,040	1	3,040
Dutch	United States.....	2	236	2	236	2	3,365	2	3,365
	England.....	1	105	1	105	1	680	1	680
	Germany.....	1	105	1	105	1	104	1	104
	Belgium.....	1	105	1	105	1	146	1	146
Austrian	Austria.....	1	105	1	105	1	146	1	146
	do.....	1	280	1	280	1	146	1	146
	England.....	6	3,088	6	3,088	6	767	6	767
	United States.....	6	3,088	6	3,088	6	2,625	6	2,625
Hawaiian	Canada and Newfoundland.....	1	850	1	850	1	548	1	548
Italian	United States.....	2	345	2	345	2	939	2	939
	Italy.....	1	189	1	189	1	682	1	682
	England.....	1	189	1	189	1	189	1	189
	Austria.....	6	3,042	6	3,042	6	3,262	6	3,262
	United States.....	348	145,008	348	149,180	390	90,298	758	239,457
Total	Total.....	348	145,008	348	149,180	390	90,298	758	239,457

\* The customs district or "princality" of La Rochelle includes the three ports of La Rochelle, Rochefort, and Tonnavy-Charente.

## LYONS.

*Review of the silk market of Lyons by Consul Peixotto.*

As the year 1876 could be well counted the most extraordinary of which the silk world has any parallel, whether as to the extent of affairs transacted or as to variations in price, so the year 1877 must rest in the annals of silk commerce as one of the worst it has ever experienced. The *Condition des Soies*,\* of Lyons, registered from the 1st of January to the 31st of December, 1877, 3,399,760 kilograms of raw silk against 5,820,872 kilograms for the same period in 1876, a decrease of 42 per cent. The last three months of 1876, after the feverish period which had marked the third trimestre of the year, prophetic by the reaction which had followed, and depressingly discouraging as they proved, scarcely justified the grave proportions and dead-sea calm which succeeded.

During the earlier weeks of 1877 the course of silk retained a certain firmness, and confidence among holders remained unshaken. Such, however, was not the case with the manufacturers, who, in the face of the high prices paid for the raw material, the difficulties to fulfill contracts taken long before, and especially the absence of all regular sales, were obliged to diminish their production.

Day by day the raw-silk market became more and more depressed, and when England, at the end of January, threw on the Lyons market several thousand bales of Asiatic silks, holders lost all courage. At the close of February prices for nearly all sorts fell from 10 to 15 per cent.

During March a fresh attempt was made to raise prices, but it failed of any significance, manufacturers refusing to purchase and resolutely curtailing their production, which fell off nearly 50 per cent.

The Oriental question, which already in the previous autumn had been first to arrest the speculative movement, followed by the war between Russia and Turkey, added fresh embarrassments to the daily growing decline in demand and consequent reduction in prices, produced at length long-retarded failures, not only at Lyons, where great wealth prevented heavy disasters, but generally on the silk markets of Europe, and especially at Marseilles, which had been the first to embark in exorbitant speculations.

No longer able to count upon insufficient stocks of the raw material actually in warehouse, nor upon a return of the speculative movement, hopes were now placed upon the failure of the growing crop, based upon the bad condition under which the culture had been commenced.

These hopes were doomed to disappointment. In France the harvest, resting largely upon the native race of yellow cocoons, resulted, both as to quantity and quality, highly favorable, producing 11,400,000 kilograms, four and a half times greater than the bad harvest of 1876.

The Italian crop, though less abundant, yielded 60 per cent. more than its predecessor of the year previous.

The discouragement which seized upon the French spinners and throwers naturally influenced the price of cocoons. Prices, which started at about 5 francs for the yellow, fell in the most favored localities to 4.50 and 4.25 francs. Prices in Italy, owing to the inferior har-

---

\* The warehouse in which all silk coming from any quarter of the globe is received, weighed, and, so to say, conditioned; after which it is everywhere received the same as a gold dollar freshly coined from the mint.—NOTE BY THE CONSUL.

vest and the failure of superior qualities, were higher, realizing 4.50 to 5 lires for the green, and 5.50 to 6 lires for the yellow cocoons. Though the period of the harvest is generally that of increased business, prices continued to decline. On the 30th of June, French organzines of the second order sold at 80 francs which had brought 125 francs the previous September; tsatlées, fourth order, which had brought 85 and 86 francs, commanded but 46 francs, and mybash No. 1, which had risen to 108 and 110 francs, were offered at 56.

The following months were subject to similar vicissitudes, and only as the autumn advanced business gave signs of renewed but still feeble life. The faults committed by the intemperate speculation of the summer of 1876, which in four months had witnessed the raw material double in price, had now borne their disastrous fruits.

In the month of August, 1877—a year after—raw silks of nearly every grade resumed their previous low prices.

1878.—The *Condition des Soies* registered for the year 1878 65,947 bales, weighing 4,333,006 kilograms, against 53,603 bales of silk, weighing 3,399,761 kilograms for the year 1877, being an increase of 27 per cent. upon the preceding year, and about 18 per cent. of the five previous years (excepting 1876).

The year dawned with fair promise, and as it advanced and as the political horizon both in France and abroad grew clearer, the eastern war closing its painful chapters and the Berlin Treaty promising to close the Oriental question at least for some years, a revival of trade and prices seemed fairly probable. The results, however, proved otherwise. The business of the year, at no time active, was generally languid, prices weak and vacillating for the raw material, and without spirit or demand for the manufactured article.

The Paris Exposition exercised a temporary favorable influence, and crop apprehensions induced some livelier activity, but no regularity or stability ensued, and when later the French crop, though it fell behind the product of 1877, turned out favorable, and the Italian, including the Tyrol, yielded 39,500,000 kilograms of cocoons to 22,500,000 kilograms for the preceding year; when China announced an export of 60,000 to 65,000 bales and Japan promised an exportation nearly equal to the previous season, while the basin of the Mediterranean gave no less indications, and it became apparent there would be no want of the raw material for the manufacturer, returning hopes perished, and business became more and more restricted and discouraged.



The following table will show the comparative market prices of raw silk at the commencement of the years 1876, 1877, 1878, and 1879, and the difference in less than two and one years:

Description.	Tises.	January 1—				Difference in less than—	
		1876.	1877.	1878.	1879.	Two years.	One year.
<b>Organzines:</b>		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work, second order).....	24-28	75 to 80	110 to 115	85	72	40	13
Brousse (filature and French, second order).....	20-22	74 to 76	107 to 112	82	71	28	11
Piedmont (tirage and work, first order).....	24-28	83	110 to 114	87	70	43	17
Bengal (French work, first order).....	24-28	65 to 67	78 to 80	66	58	27	8
<b>Trames:</b>							
France (filature and work, second order).....	24-28	75	106	82	68	40	14
Italy (Italy and French work, first order).....	24-28	69 to 72	107 to 110	81	67	41	14
China (French work, second order).....	40-45	53 to 55	76 to 80	67	55	28	12
Japan (work <i>tours complets</i> , first order).....	26-30	68 to 70	94 to 100	72	61	37	11
<b>Grèges:</b>							
France ( <i>boute nouée</i> , first order).....	10-12	68 to 70	126	88	67	59	21
Italy ( <i>noumoué</i> , second order).....	9-11	55 to 56	102 to 105	75	58	45	17
Japan (mybass, second order).....	14-18	41 to 43	82 to 87	57	45	39	12
Tastées, &c.....		43 to 45	74 to 76	58	45	30	13

The revival of business which succeeded the Franco-German war was pushed to such unreflecting proportions as could not fail to invoke a corresponding reaction.

The financial crisis of 1873, which, commencing in Austria, followed in Germany and the United States, left such profound wounds as continued to be felt in their effects up to the close of 1878.

From the moment of the first troubles in the provinces of Turkey, in 1875, the nightmare of a general European explosion scarcely ceased for a moment to weigh heavily upon the mind of the business world. When the apprehensions of a general war were finally calmed, England became in her turn the theater of a commercial crisis (still continued) scarcely paralleled in her history. No symptom of amelioration marked the close of 1878; the markets rested stationary. In fact, as will be seen from the table presented in this connection, prices ruled 15 to 20 per cent. lower than the year before. It is to be remarked, however, that the reduction affected silks of superior quality rather than those of lower grades. Thus the silks of France and Italy declined 25 per cent., while those of China and Japan fell but 19 per cent.

The reason for this difference is easily found in the increased demand for goods of inferior fabric, or those of wool and cotton wherein the admixture of silk could be made of cheaper grades.

The importation of silk of all products was, for the year 1878, as follows:

	Kilograms.
Cocoons.....	1,787,500
Grèges (raw).....	5,191,100
Ouvrées (thrown).....	1,151,800
Total.....	8,130,400

In 1877 the importations were—

	Kilograms.
Cocoons.....	1,318,332
Grèges.....	3,205,005
Ouvrées.....	1,074,574
Total.....	5,597,911

The increased import indicates the importance which the Lyons silk market takes from year to year, but it also explains how the market has constantly fallen, and this more clearly from the fact that the export has been proportionally much inferior to the import.

For example, in 1877, the exports show—

	Kilograms.
Cocoons.....	801, 958
Gréges.....	2, 273, 853
Ouvrées.....	164, 570
Total.....	3, 240, 381

For 1878 the export was—

	Kilograms.
Cocoons.....	695, 852
Gréges.....	2, 560, 719
Ouvrées.....	421, 065
Total.....	3, 677, 636

The total export to Europe from the extreme Orient is 80,029 bales. Of this amount Lyons receives 41,287 bales, showing how largely its trade in this staple increases. It naturally follows that the most powerful opposition exists here to the attempt to impose duties on the raw article on its entrance into France, and in favor of free trade.

1879.—The speculation following the failure of the silk crop of the present year commenced early in May, and for several weeks the market of Lyons was the prey to a madness resembling the wild days of 1876. At the close of May millions had changed hands, but the speculation was generally limited to the raw silk fraternity, the manufacturers holding back with curiosity and suspicion.

Japanese silks led the way, No. 1 extra selling at 67 to 70 francs, No. 1½ from 64 to 65, and Nos. 2 to 3 60 to 63 francs. European silks came bounding after gréges of cévenes extra and first order, bringing 83 to 85 francs, followed by a still higher advance, reaching 90 to 95 francs. Organzines of Italy, first order, sold at 87 francs; gréges of Italy, first order, 85 francs; second order, from 77 to 80 francs.

The markets of Milan and London were no less excited. At Marseilles the speculation was rampant in cocoons. This state of affairs, as predicted in my dispatches at the time, lasted but a brief period.

In spite of the failure of the crop, the limited demand for pure silk goods in America, and still less in England, where business instead of improving grew worse and worse, soon caused a reaction; and prices, which had mounted 10, 20, and even 30 per cent., gradually fell back until they rested at the former figure, where they now remain with restricted sales; while piece goods, with few exceptions, can be commanded at old prices or a very trifling advance.

It will be seen from the foregoing that the fiscal year 1878-'79 has been for the silk commerce of Lyons little more favorable than its predecessor. The activity of the past May and June was of short duration, and for manufacturers proved of little or no advantage. The attempt of one of the largest houses to reduce the labor tariff 20 per cent. was stoutly resisted by the workmen, who immediately struck work, and, after three weeks' suspension, were invited to resume their places.

This labor crisis, in which 2,000 to 3,000 hands participated, extended to other trades, but, as with the silk-workers, was finally compromised. At Vienne, an hour by rail from Lyons, nearly 10,000 workmen who had struck were out of employ at one time, and for double the period of their Lyons brethren; but here, too, in the end, matters were reconciled, though, it is believed, with less satisfaction to the laborer.

It is feared that, should the present depression continue much longer' manufacturers, in order to compete with their German and Swiss competitors, will be forced to combine and reduce the present existing tariff; and should this occur, fresh and serious labor troubles may be apprehended.

Of the 120,000 looms employed by the silk industry of Lyons, 30,000 alone are located in the city proper; the rest, 90,000, are scattered through this and the adjoining department; but the intimate association which exists by reason of the trade-unions is capable of producing homogeneity of action which may, in the event of a labor crisis," result in wide suspension of work and consequent great reduction in the production of goods. It being generally conceded by manufacturers that excessive production added to limited consumption has been the main cause of the crisis which has so long affected the silk trade, a suspension of work would ultimately prove beneficial, though it would naturally entail temporary losses and, to those of limited capital, consequent failure. Yet, in the present position of affairs, the worst that could happen would, it is believed, be better than the actual situation. In point of fact, this reduction has been the order of the day since 1877, particularly for black silks and the better qualities of plain colors. The resumption of work in these goods for 1878-'79 has continued to be restricted, limited to a careful scrutiny of the state of the English and American markets. Even should there spring up a revival for this class of goods, the stocks actually on hand in this and particularly the London and New York markets would meet for a long while any probable demand. Should, however, this demand increase, and continue, and become pressing, a heavy rise in prices may safely be predicted.

The trade of the year has been principally in black and colored satins, the demand for which has been large and prices fairly profitable. In fancy silks, novelties, plushes, figured velvets, in pekins and façonnées there has been a comparatively active business.

#### FRAUDS AND UNDERVALUATIONS.

The extent to which undervaluations are carried it would be somewhat difficult to determine. It is easy to make assertions; it is more difficult to verify them. The heavy ad valorem duties imposed upon silk goods (60 per cent.) by our customs-revenue unquestionably have and continue to induce undervaluations of invoices, and there is little doubt but that every possible ways and means are resorted to for this purpose. There are several reasons conspiring to induce repetition and continuance in this illegitimate practice; first is the high duty itself; second, the terrible competition made by Zurich, Basle, Elberfeld, and Orefeld, no less scrupulous in attempting to evade the law; third, and more important than seems to be attached to the fact, consignments made to England expressly for the purpose of being shipped to the United States. I have verified in several instances by examination of qualities, widths, and character of the goods, which, being wholly or quite unsalable in England, must necessarily be intended for the United States. It is my opinion that large shipments from the continent find their way through England to America and are smuggled through Canada. When the extent of our northern frontier and the facilities for introducing goods in this surreptitious manner is considered, I am surprised that this contraband traffic is not greater and more efficient guards taken against its practice. If it is now limited it is simply because of the comparatively limited demand for pure silk goods. Let this demand revive and the

present *ad valorem* duty be continued, a large increase of this Canada contraband traffic may be apprehended.

#### REMEDY.

The plain remedy, according to my apprehension, and that which at the same time will conserve and protect the interests of home manufacturers who cannot, at present at least, compete with foreign rivals for the finer, and certainly not for the finest, silk fabrics, is to change the present *ad valorem* for specific duties, making the tariff according to a classification which shall draw the line between pure silk goods, no matter what their quality may be, and for silk goods mixed with cotton, wool, linen, or other material.

#### TREATY OF COMMERCE WITH THE UNITED STATES.

I have conceived it to be my duty to report as to the public sentiment of this community upon the proposed Franco-American treaty of commerce. With this view I have, from time to time, acquainted the department with the action taken by the chamber of commerce of Lyons, which fully represents the manufacturing and commercial interests of the city. Now, as formerly, the chamber is in favor of a treaty of commerce with the United States, and continues to urge with much force and ability its views upon the government at Paris.

The total declared exports from this consular district for the United States for the first nine months of 1879, ending yesterday, September 30, have been, in francs, 38,472,465.60. For the same period, 1878, in francs, 32,366,023.50. Increase for this year, 6,106,442.10 francs. This increase has been in silk dress goods, of which 5,239,375.20 francs have been exported in excess of last year. The exports to the United States from Lyons for the third quarter of the year 1879, ending September 30, have been, in francs, 15,895,768.95. For the same trimestre, in francs, 1878, 13,327,520.35. Increase, 2,568,248.60 francs.

#### IMPORT TRADE.

I cannot conclude this report without urging upon the government the necessity of concluding at as early a period as possible a commercial treaty with France.

In the absence of such to-day nearly all our manufactures are prohibited from entry into this country, and when entered are surreptitiously made through England. A recent import of this character, of which I have personal knowledge through the French custom-house, was seized, the goods declared to be American, and a penalty of 6,000 francs exacted, not only extinguishing the profit but entailing heavy loss.

The only articles coming directly, such as canned meats, have met with but limited success.

Recently a New Yorker has established, for the first time, I believe, an American importing house in Lyons, and in some articles is fairly encouraged. Cheap furniture and wooden ware meet with profitable return. A lively trade is being transacted in alcohol, but is limited thus far to Marseilles; also in cotton-seed oil.

There is a rich field for our manufactures in France (where inferior articles are produced) in at least a hundred necessary household conveniences. American stoves and ranges, mechanics' tools, hardware, paper, starch, &c., are some few of the articles for which there would be an im-

mense demand, but nearly all, or all of these, as well as all manufactures of iron from the United States, are prohibited under the existing tariff.

I beg to supplement this report with the following documents as an integral part of the same:

TABLE I.—Value of declared goods for the fiscal year 1878-'79 ending June 30, and for the quarter of 1879 ending September 30.

TABLE II.—Exports of silk goods from France for the years 1868 to 1877.

TABLE III.—Imports and exports of silks in France, 1827 to 1877.

TABLE IV.—Exports of silk goods from France for the years 1868 to 1877. Descriptive summary.

TABLE V.—Description and value of silk goods produced in Lyons for the years 1876, 1877, and 1878.

TABLE VI.—Production of raw silk for the years 1875, 1876, 1877, and 1878 in Europe, the Levant, &c.

TABLE VII.—Exports of raw silks from Lyons to the United States from October, 1878, to September 30, 1879, and exports of raw silks from 1869 to 1879.

TABLE VIII.—Official quotations of silk at Lyons during the year 1878 and September 29, 1879.

APPENDIX I.—The water supply of Lyons, in ancient times and at present.

APPENDIX II.—Silk industry of Switzerland.

APPENDIX III.—State of instruction at Lyons and in the department of the Rhone, 1878-'79.

BENJ. F. PEIXOTTO.

UNITED STATES CONSULATE,  
*Lyons, October 1, 1879.*

1.—*Value of declared exports from the consular district of Lyons to the United States during the four quarters of the fiscal year ending September 30, 1879.*

Articles.	Quarter ending—		
	September 30, 1878.	December 31, 1878.	March 31, 1879.
Buttons and trimmings.....	\$10, 130 90	\$6, 218 00	\$13, 573 60
Church ornaments and metallic trimmings.....	32, 577 37	34, 318 37	21, 665 22
Calfskins and leather.....	5, 337 18	1, 295 43	4, 639 06
Cotton goods.....	3, 695 57	1, 064 77	7, 250 64
Dyestuffs.....	13, 999 16	9, 285 50	12, 330 06
Gloves.....	73, 179 11	20, 868 94	27, 833 90
Hardware, machinery, and rails.....	2, 819 59		203 44
Laces and tulles.....	69, 491 99	38, 689 38	40, 929 33
Merinoes, cashmeres, and miscellaneous dress-goods.....	87, 718 59	31, 767 30	29, 761 79
Musical instruments.....	2, 735 70	1, 175 14	2, 961 00
Miscellaneous.....	26, 813 38	33, 238 28	31, 630 32
Silk, raw.....	152, 076 86	161, 586 69	175, 930 67
Silk and velvet piece-goods.....	2, 064, 367 60	1, 391, 875 26	2, 650, 071 00
Silk and velvet ribbons.....	4, 774 56	3, 370 63	8, 241 08
Shawls.....	10, 925 40	1, 167 39	2, 003 56
Wines and liquors.....	11, 568 44	19, 241 54	8, 509 50
Total in United States gold.....	2, 572, 211 40	1, 760, 087 98	3, 037, 620 27
Total for the preceding year.....	2, 864, 716 21	1, 448, 024 23	2, 491, 664 54
Increase.....		312, 063 70	545, 955 73
Decrease.....	292, 504 81		

## 1.—Value of declared exports from the consular district of Lyons, &amp;c.—Continued.

Articles.	Quarter ending—	Total for the year.	For the third quarter of the year 1879.
	June 30, 1879.		
Buttons and trimmings .....	\$1,040 46	\$30,961 96	\$25,889 36
Church ornaments and metallic trimmings .....	18,534 68	107,125 64	26,120 43
Calfskins and leather .....	.....	11,271 67	5,308 55
Cotton goods .....	3,653 06	15,684 04	2,457 03
Dyestuffs .....	9,016 82	44,681 54	22,797 73
Gloves .....	25,572 09	147,455 04	50,738 20
Hardware, machinery, and rails .....	2,354 70	5,377 73	2,212 47
Laces and tulle .....	56,384 39	214,496 57	60,011 89
Merinoes, cashmeres, and miscellaneous dress-goods .....	.....	140,248 18	.....
Musical instruments .....	3,372 76	10,244 90	2,988 68
Miscellaneous .....	27,242 13	124,084 59	61,900 71
Silk, raw .....	96,475 83	588,020 05	487,676 03
Silk and velvet piece-goods .....	1,044,248 20	7,150,562 06	2,298,527 78
Silk and velvet ribbons .....	6,471 17	22,757 44	11,678 32
Shawls .....	.....	14,096 35	.....
Wines and liquors .....	25,215 08	64,535 56	15,578 30
Total in United States gold .....	1,319,681 37	8,689,001 02	3,067,885 48
Total for the preceding year .....	1,182,766 56	7,987,171 59	2,572,211 43
Increase .....	136,914 81	702,429 43	495,674 05

## 2.—Exports of silk goods from France to the following countries for the years 1868 to 1877, inclusive.

## PIECE-GOODS, TRIMMINGS, AND RIBBONS.

Countries.	1868.	1869.	1870.	1871.	1872.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
England .....	207,740,623	204,075,797	181,264,466	153,583,334	117,492,866
United States .....	43,975,168	67,140,673	134,352,872	146,399,047	120,874,677
Germany .....	37,448,380	27,169,845	7,168,999	3,618,343	8,032,404
Switzerland .....	65,195,484	51,901,440	77,792,078	76,523,245	87,777,221
Italy .....	20,716,805	27,718,259	16,687,458	20,421,886	16,772,828
Belgium .....	13,922,559	10,988,103	11,373,861	16,331,405	22,967,855
Spain .....	6,083,243	6,228,084	8,337,618	12,852,842	7,625,631
Other countries .....	57,245,534	52,118,760	48,116,153	53,353,410	56,888,993
Total .....	452,327,776	447,340,961	485,093,505	483,086,512	437,731,975

Countries.	1873.	1874.	1875.	1876.	1877*.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
England .....	141,558,657	172,153,615	153,920,951	143,154,714	.....
United States .....	100,158,739	90,941,190	80,610,038	64,974,678	.....
Germany .....	16,532,740	12,439,777	15,048,752	21,444,135	.....
Switzerland .....	112,327,012	61,387,923	47,959,302	8,243,341	.....
Italy .....	14,704,598	12,869,169	13,566,528	11,001,801	.....
Belgium .....	21,421,540	14,911,691	14,063,291	8,850,215	.....
Spain .....	6,327,241	7,755,559	7,416,899	5,352,094	.....
Other countries .....	65,475,262	43,558,359	43,842,472	27,649,793	.....
Total .....	478,505,789	416,017,483	376,598,523	295,670,771	275,077,000

\* Details not yet received.

## 3.—Imports and exports of silk in France from 1827 to 1877.

[From official tables.]

Years.	Imports.		
	Cocoons.	Silk grèges (raw).	Thrown silk.
<b>Annual average of—</b>	<b>Kilograms.</b>	<b>Kilograms.</b>	<b>Kilograms.</b>
1827-1836	17,799	702,943	538,075
1837-1846	17,441	1,109,587	648,502
1847-1856	427,833	1,438,268	947,215
1857-1866	1,131,002	3,117,324	1,070,255
1867	1,062,400	3,588,150	1,043,300
1868	1,518,150	4,137,704	985,220
1869	1,553,504	3,224,033	1,401,587
1870	1,857,983	3,184,129	681,943
1871	1,713,884	2,968,381	1,306,682
1872	1,746,568	4,062,155	1,206,290
1873	1,970,272	3,708,090	1,517,825
1874	2,338,172	5,132,628	1,334,761
1875	2,002,923	5,135,589	1,671,391
1876	2,704,035	6,182,785	1,752,819
1877	1,316,000	3,205,200	1,074,503

Years.	Exports.		
	Cocoons.	Silk grèges (raw).	Thrown silk.
<b>Annual average of—</b>	<b>Kilograms.</b>	<b>Kilograms.</b>	<b>Kilograms.</b>
1827-1836	.....	453,676	160,442
1837-1846	.....	543,809	236,272
1847-1856	.....	436,625	271,709
1857-1866	28,391	1,401,775	303,316
1867	243,097	1,635,829	204,554
1868	307,562	1,908,272	188,778
1869	235,751	1,676,984	145,820
1870	819,545	2,024,462	121,459
1871	411,505	951,022	42,087
1872	284,982	1,995,022	123,378
1873	584,890	1,921,487	122,089
1874	562,164	2,423,311	96,902
1875	651,871	2,862,717	163,394
1876	1,008,881	2,802,808	209,343
1877	905,654	2,273,602	104,619

Years.	Balance for home consumption.		
	Cocoons.	Silk grèges (raw).	Thrown silk.
<b>Annual average of—</b>	<b>Kilograms.</b>	<b>Kilograms.</b>	<b>Kilograms.</b>
1827-1836	17,799	240,267	377,633
1837-1846	17,441	1,565,778	412,280
1847-1856	399,497	1,001,643	675,506
1857-1866	888,505	1,716,049	706,939
1867	784,838	1,923,330	838,746
1868	1,282,408	2,229,432	776,451
1869	1,133,959	1,548,049	1,256,267
1870	446,478	1,159,677	570,484
1871	1,418,922	2,035,859	1,264,605
1872	1,161,708	2,067,183	1,082,912
1873	1,408,108	1,786,612	1,395,786
1874	1,686,801	2,709,317	1,235,859
1875	994,042	2,372,872	1,507,457
1876	1,798,881	3,879,979	1,544,476
1877	513,412	931,508	906,881

4.—Table of exports of silk goods from France from 1868 to 1877.

## PIECE-GOODS, TRIMMINGS, AND RIBBONS.

Articles.	1868.	1869.	1870.	1871.	1872.
Handkerchiefs (unbleached and printed) .....	<i>Franks.</i> 4, 108, 956	<i>Franks.</i> 3, 462, 172	<i>Franks.</i> 5, 754, 288	<i>Franks.</i> 7, 056, 184	<i>Franks.</i> 4, 054, 736
Plain goods (pure silk) .....	323, 329, 446	312, 900, 898	351, 688, 428	316, 318, 600	317, 843, 042
Fancy goods (pure silk) .....	7, 628, 480	3, 693, 080	4, 071, 690	4, 302, 870	1, 759, 044
Figured goods (pure silk), and mixed with gold and silver thread .....	845, 832	832, 348	519, 043	1, 280, 962	522, 282
Silk goods, mixed with other materials .....	21, 061, 045	15, 963, 578	19, 475, 738	15, 610, 530	19, 539, 592
Crapes, plain and figured .....	974, 950	596, 096	896, 321	446, 600	1, 009, 790
Tulle (net and bobines) .....	9, 229, 326	10, 960, 824	11, 269, 932	9, 818, 400	13, 630, 380
Ribbons, velvet, silk, and mixed with other materials .....	56, 844, 060	77, 498, 589	64, 641, 420	103, 580, 615	51, 434, 355
Blankets, gauze, laces, hosiery, trimmings, and fabrics of waste silk .....	28, 305, 681	21, 424, 370	27, 276, 645	24, 671, 761	28, 088, 854
Total .....	452, 527, 776	447, 331, 955	485, 093, 505	483, 086, 512	437, 731, 975

Articles.	1873.	1874.	1875.	1876.	1877.
Handkerchiefs (unbleached and printed) .....	<i>Franks.</i> 3, 270, 468	<i>Franks.</i> 2, 474, 060	<i>Franks.</i> 4, 424, 608	<i>Franks.</i> 6, 479, 716	<i>Franks.</i> 5, 745, 637
Plain goods (pure silk) .....	361, 459, 712	323, 049, 552	278, 808, 302	197, 739, 045	158, 632, 016
Fancy goods (pure silk) .....	2, 714, 036	1, 523, 332	4, 284, 896	7, 502, 564	7, 417, 464
Figured goods (pure silk), and mixed with gold and silver thread .....	342, 050	210, 630	760, 710	4, 959, 176	5, 851, 370
Silk goods, mixed with other materials .....	23, 111, 800	11, 893, 362	19, 572, 170	27, 475, 760	36, 641, 440
Crapes, plain and figured .....	1, 640, 410	481, 870	2, 666, 345	4, 509, 525	7, 682, 740
Tulle (net and bobines) .....	17, 043, 328	13, 807, 339	8, 721, 192	7, 555, 380	8, 064, 588
Ribbons, velvet, silk, and mixed with other materials .....	55, 422, 109	42, 118, 900	34, 612, 152	20, 203, 343	19, 181, 702
Blankets, gauze, laces, hosiery, trimmings, and fabrics of waste silk .....	23, 501, 876	20, 458, 438	22, 748, 148	19, 246, 262	30, 230, 049
Total .....	478, 506, 789	416, 017, 483	376, 598, 523	295, 670, 771	275, 077, 000

5.—Description and value of silk goods manufactured at Lyons, for the years 1876, 1877 and 1878.

Description.	1876.	1877.	1878.
<i>Pure silk goods.</i>			
Black failles and taffetas (souples and culs) .....	<i>Franks.</i> 190, 000, 000	<i>Franks.</i> 110, 000, 000	<i>Franks.</i> .....
Colored failles and taffetas .....	110, 000, 000	70, 000, 000	.....
Black and colored satins .....	3, 500, 000	3, 500, 000	.....
Velvets .....	14, 000, 000	7, 000, 000	.....
Umbrella silks .....	15, 000, 000	11, 000, 000	.....
Linings, facings, marcelines, Florence lustrines .....	10, 000, 000	8, 000, 000	.....
Cravats, moires antiques, taffetas quadrilles .....	2, 500, 000	1, 800, 000	.....
Foulards, unbleached, printed or dyed .....	20, 000, 000	12, 000, 000	.....
Furniture and church stuffs .....	.....	1, 200, 000	.....
Total .....	365, 000, 000	224, 500, 000	224, 250, 000
<i>Figured, fancy, and brodered stuffs (pure silk).</i>			
Dress goods, furniture, cravats, &c. ....	19, 500, 000	21, 500, 000	29, 000, 000
<i>Mixed silk, cotton, and woolen stuffs.</i>			
Satins, black and colored .....	16, 000, 000	16, 000, 000	.....
Velvets, black and colored .....	6, 000, 000	3, 000, 000	.....
Pushes, for hatters and millinery .....	6, 000, 000	4, 000, 000	.....
Popelins, sicilienes, bengalines .....	4, 000, 000	2, 000, 000	.....
Figured stuffs, trames on chaine, coton ou laine, pour robes .....	800, 000	500, 000	.....
Furniture and church ornaments .....	1, 000, 000	1, 000, 000	.....
Turquoises, trames coton .....	2, 500, 000	1, 200, 000	.....
Foulards mossoul .....	3, 000, 000	2, 000, 000	.....
Cravats, shawls, fichus .....	500, 000	500, 000	.....
Tissues of waste silk, and wool, and cotton for furniture and hangings .....	.....	2, 000, 000	.....
Total .....	38, 800, 000	32, 200, 000	61, 800, 000



## 5.—Description and value of silk goods manufactured at Lyons, &amp;c.—Continued.

Description.	1876.	1877.	1878.
<i>Tissues for India, the Levant, and Africa.</i>			
Silk and cotton stuffs, with gold or silver, pure or imitation..	<i>France.</i> 5, 000, 000	<i>France.</i> 4, 000, 000	<i>France.</i> 4, 000, 000
<i>Sundry tissues.</i>			
Crapes of all variations.....	26, 000, 000	7, 000, 000	.....
Gauzes, grenadines, and crapes de chine .....		10, 500, 000	.....
Tulles of all variations (plain).....		4, 500, 000	.....
Laces, lamas, trimmings.....		5, 300, 000	.....
Total.....		27, 300, 000	26, 500, 000
Grand total .....	454, 100, 000	309, 500, 000	345, 550, 000

## 6.—Production of raw silk for the following years.

Countries.	1875.	1876.	1877.	1878.
<b>Western Europe:</b>	<i>Kilograms.</i>	<i>Kilograms.</i>	<i>Kilograms.</i>	<i>Kilograms.</i>
France.....	731, 000	155, 000	872, 000	608, 000
Coralca and Algeria.....	1, 100	1, 150	1, 120	1, 570
Italy.....	2, 004, 000	993, 000	1, 503, 000	2, 003, 000
Spain.....	115, 100	85, 500	68, 000	55, 000
Portugal.....	3, 000	3, 000	2, 000	.....
	3, 450, 800	1, 237, 650	2, 447, 720	3, 390, 870
<b>Levant:</b>				
Turkey: Anatolia (Brussa).....	152, 000	105, 000	75, 800	85, 000
Polo.....	22, 800	15, 700	15, 000	} 56, 000
Salonica.....	50, 900	42, 000	32, 000	
Adrianople.....	51, 000	36, 000	20, 000	8, 000
Syria.....	125, 700	117, 500	140, 000	165, 000
Greece.....	10, 200	10, 000	9, 300	10, 000
Georgia, Persia, Korassan.....	310, 000	310, 000	310, 000	200, 000
	738, 600	636, 200	601, 300	524, 000
<b>Orient:</b>				
China: Exportations from Shanghai.....	3, 323, 000	3, 467, 000	2, 700, 000	3, 025, 000
Exportations from Canton.....	1, 144, 000	1, 180, 000	957, 000	983, 000
Japan: Exportations from Yokohama.....	679, 000	1, 061, 000	1, 101, 000	925, 000
East India: Exportations from Calcutta.....	388, 400	564, 800	671, 700	353, 000
	5, 532, 400	6, 272, 800	5, 429, 700	5, 246, 000
Total .....	9, 727, 800	8, 146, 650	8, 478, 720	9, 100, 370

## 7.—Exports of raw silk from Lyons to the United States from October 1, 1878, to September 30, 1879.

	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Total in United States gold ...	\$161, 536 60	\$175, 930 67	\$204, 475 83	\$457, 676 08	\$921, 619 22
Total for the preceding year ..	182, 794 47	167, 454 07	78, 968 41	152, 076 86	581, 289 81
Increase.....		8, 476 60	17, 507 42	335, 599 17	340, 329 41
Decrease.....	21, 257 78				

*Exports of raw silk from Lyons to the United States for the following years, from October 1 to September 30, each year.*

Years.	Value.
1879 .....	\$921, 619 21
1878 .....	581, 293 81
1877 .....	1, 031, 479 06
1876 .....	468, 045 09
1875 .....	613, 523 98
1874 .....	397, 418 57
1873 .....	494, 084 11
1872 .....	646, 340 76
1871 .....	661, 746 87
1870 .....	278, 397 85
1869 .....	201, 852 80

*8.—Official quotations of silk at Lyons during the year 1878 and a part of 1879.*

Qualities.		1878.		
		January.	April 6.	July 6.
<b>Organsins:</b>		<i>Frances.</i>	<i>Frances.</i>	<i>Frances.</i>
France (filature and work) .....	2d quality, 24-26..	83 to 87	75 to 78	79 to 81
Italy (French work) .....	2d quality, 20-22..	82 to 84	72 to 73	73 to 75
Bengal (French work) .....	2d quality, 26-30..	64	58 to 60	60
China (French and Italian work) .....	1st quality, 40-45..	68 to 70	60 to 63	60 to 61
<b>Trams:</b>				
France (filature and work) .....	2d quality, 20-24..	80 to 83	73 to 74	74 to 76
Italy .....	2d quality, 24-26..	80 to 82	70 to 72	72
Bengal (French and Italian work) .....	2d quality, 24-28..	64 to 66	60	60 to 62
China (French work) .....	2d quality, 40-45..	65 to 66	57	58 to 60
<b>Raw silk:</b>				
France (knotted ends) .....	2d quality, 10-12..	88	68 to 70	.....
Italy (unknotted ends) .....	2d quality, 9-11..	73 to 76	58 to 60	62
Brousses (white knotted ends) .....	1st quality, 12-14..	81 to 83	67 to 68	66 to 68
China tasee (4ths) .....	.....	55	44 to 46	47 to 48
Japan grapes, No. 2 .....	.....	57 to 60	50 to 52	50 to 52

Qualities.		1878.		1879.	
		October 5.	December 28.	September 29.	
<b>Organsins:</b>		<i>Frances.</i>	<i>Frances.</i>		<i>Frances.</i>
France (filature and work) .....	2d quality, 24-26..	76 to 78	72 to 75	2d quality, 24-26..	76
Italy (French work) .....	2d quality, 20-22..	71	66 to 67	2d quality, 20-22..	70
Bengal (French work) .....	2d quality, 26-30..	56	54	2d quality, 22-26..	60
China (French and Italian work) .....	1st quality, 40-45..	61	60	2d quality, 40-45..	54
<b>Trams:</b>					
France (filature and work) .....	2d quality, 20-24..	72 to 73	66 to 68	2d quality, 20-24..	.....
Italy .....	2d quality, 24-26..	65	63 to 64	2d quality, 26-28..	78
Bengal (French and Italian work) .....	2d quality, 24-28..	.....	53	2d quality, 24-28..	55
China (French work) .....	2d quality, 40-45..	58 to 59	55	2d quality, 40-45..	53 to 54
<b>Raw silk:</b>					
France (knotted ends) .....	2d quality, 10-12..	70	66	2d quality, 10-12..	.....
Italy (unknotted ends) .....	2d quality, 9-11..	62 to 64	57	2d quality, 9-11..	.....
Brousses (white knotted ends) .....	1st quality, 12-14..	63 to 65	60	1st quality, 12-14..	.....
China tasee (4ths) .....	.....	47 to 48	43 to 44	.....	41 to 43
Japan grapes, No. 2 .....	.....	50 to 51	44 to 46	Grapes, No. 2 .....	.....

*Résumé of the silk commerce of France for the first nine months of 1878 and 1879.*

## IMPORTATIONS.

(Increase + ; decrease -.)

Silks.	1879.	1878.	Difference.
Cocoons .....	<i>Francs.</i> 14, 581, 000	<i>Francs.</i> 15, 827, 000	<i>Francs.</i> -1, 246, 000
Silk :			
Grèges .....	137, 779, 000	135, 861, 000	+1, 918, 000
Thrown .....	41, 010, 000	56, 448, 000	-15, 248, 000
Dyed and others .....	555, 000	400, 000	+155, 000
Bourres and frisons :			
En masse .....	24, 559, 000	22, 124, 000	+2, 435, 000
Combed and carded .....	2, 894, 000	1, 638, 000	+1, 256, 000
Spun or fleuret .....	6, 804, 000	5, 966, 000	+818, 000
Total .....	228, 182, 000	238, 284, 000	
Tissues of pure silk .....	15, 681, 000	14, 973, 000	+708, 000
Mixed tissues .....	6, 416, 000	5, 355, 000	+1, 061, 000
Gauzes, crapes, laces, and tulles .....	1, 790, 000	2, 085, 000	-288, 000
Tissues of waste silk .....	1, 748, 000	1, 153, 000	+595, 000
Hosiery .....	378, 000	384, 000	-6, 000
Ribbons .....	1, 140, 000	1, 505, 000	-365, 000
Total .....	27, 162, 000	25, 455, 000	

## EXPORTATIONS.

Cocoons .....	<i>Francs.</i> 8, 260, 000	<i>Francs.</i> 7, 964, 000	<i>Francs.</i> +296, 000
Silk :			
Grèges .....	51, 140, 000	45, 561, 000	+5, 579, 000
Thrown .....	4, 104, 000	4, 851, 000	-747, 000
Dyed and others .....	16, 305, 000	17, 958, 000	-1, 653, 000
Bourres and frisons :			
En masse .....	8, 027, 000	6, 007, 000	+2, 020, 000
Combed and carded .....	12, 927, 000	9, 835, 000	+3, 592, 000
Spun or fleuret .....	3, 265, 000	3, 098, 000	+167, 000
Total .....	104, 028, 000	94, 774, 000	
Tissues of pure silk .....	82, 245, 000	101, 049, 000	-18, 804, 000
Mixed tissues .....	47, 125, 000	46, 662, 000	+503, 000
Gauzes, crapes, laces, and tulles .....	17, 128, 000	21, 983, 000	-4, 770, 000
Tissues of waste silk .....	2, 625, 000	2, 760, 000	-125, 000
Trimings .....	14, 376, 000	13, 400, 000	+976, 000
Ribbons .....	15, 251, 000	17, 554, 000	-2, 203, 000
Hosiery .....	1, 465, 000	1, 067, 000	+408, 000
Total .....	180, 465, 000	204, 480, 000	

*Silk commerce of France for the years 1878 and 1879.*

## IMPORTS AND EXPORTS.

## IMPORTATIONS.

Silks.	1879.	1878.	Increase.	Decrease.
Cocoons .....	\$5, 147, 600	\$4, 630, 400	\$517, 200	.....
Raw silks .....	36, 048, 400	36, 254, 400	.....	\$206, 000
Thrown silks .....	10, 468, 800	14, 691, 800	.....	\$4, 223, 000
Dyed silks or others .....	145, 400	184, 400	11, 000	.....
Bourres and frisons :				
En masse .....	7, 250, 200	6, 431, 000	819, 200	.....
Combed and carded .....	676, 800	472, 600	204, 200	.....
In thread or fleuret .....	954, 400	1, 606, 600	652, 200	.....
Total .....	60, 601, 600	64, 221, 200	2, 203, 800	4, 429, 000
Tissues of pure silk .....	4, 117, 200	4, 235, 800	.....	118, 600
Mixed tissues .....	1, 967, 600	1, 607, 600	360, 000	.....
Gauzes, crapes, laces, and tulles .....	490, 000	400, 800	89, 200	.....
Tissues .....	417, 200	243, 200	174, 000	.....
Hosiery .....	111, 000	116, 400	.....	5, 400
Ribbons .....	230, 600	406, 400	.....	175, 800
Total .....	7, 333, 600	7, 010, 200	623, 200	299, 800

*Silk commerce of France for the years 1878 and 1879—Continued.*

## EXPORTATIONS.

Silks.	1879.	1878.	Increase.	Decrease.
Cocoons .....	\$2,595,800	\$1,777,600	\$818,200	.....
Raw silks .....	15,389,000	13,053,000	2,336,000	.....
Thrown silks .....	1,239,600	1,212,600	27,000	.....
Dyed silks and others .....	4,362,800	4,727,600	.....	\$364,800
Bourres and frisons:				
En masse .....	2,010,200	1,728,600	281,600	.....
Combed and carded .....	3,441,400	2,698,200	743,200	.....
In thread or fleur .....	893,600	769,400	104,200	.....
Total .....	29,932,400	25,967,000	4,310,200	364,800
Silk tissues .....	23,070,800	27,250,200	.....	4,179,400
Mixed tissues .....	11,119,800	9,149,000	1,970,800	.....
Ganzes, crapes, tulles, and laces .....	4,361,400	5,192,400	.....	831,000
Tissues of .....	491,400	684,200	.....	192,800
Hosiery .....	375,800	288,200	87,600	.....
Silk trimmings .....	3,721,600	3,427,600	294,000	.....
Ribbons .....	4,122,200	4,597,400	.....	475,200
Total .....	47,263,000	50,569,000	2,352,400	5,678,400

*Comparative prices of silks at Lyons, France (leading qualities), for the years 1876 to 1880, inclusive.*

Silks.	Quality.	1876.	1877.	1878.	1879.	1880.
Organsins:		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work) ..	2d quality, 24-26 ..	77 to 80	.....	.....	68	70 to 79
Italy (French work) .....	2d quality, 22-24 ..	.....	104 to 106	80 to 82	65 to 66	74
Bengal (French work) .....	2d quality, 26-30 ..	60 to 63	.....	.....	.....	61 to 62
China (French and Italian work) ..	2d quality, 40-45 ..	60 to 62	76 to 78	64	56 to 57	56 to 57
Trams:						
France (filature and work) ..	2d quality, 20-24 ..	.....	.....	.....	63 to 64	72 to 75
Italy .....	2d quality, 24-26 ..	66 to 69	.....	.....	56	56 to 59
China (French work) .....	2d quality, 40-45 ..	54 to 57	75	.....	.....	.....
Grèges:						
France (knotted ends) .....	2d quality, 10-12 ..	66 to 68	.....	.....	66	71 to 72
Brousa, Adrianople (knotted ends) ..	2d quality, 10-12 ..	57 to 58	.....	.....	57 to 58	68
Italy (unknotted ends) .....	2d quality, 9-11 ..	.....	103	.....	.....	68 to 70
China (tsatlée No. 4) .....	.....	42 to 44	67 to 69	53	43 to 44	47 to 48
Japan (mybash No. 2) .....	.....	43 to 44	82 to 85	.....	44 to 46	56 to 58

*Comparative prices of silks at Lyons for fifteen years, 1865 to 1879, inclusive.*

Silks.	Quality.	1865.	1866.	1867.	1868.
Organsins:		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work) ..	1st quality, 22-28 ..	123 to 126	123 to 128	132 to 135	150 to 152
Piedmont (filature and work) ..	1st quality, 22-28 ..	120 to 125	118 to 123	122 to 130	145 to 151
Italy .....	2d quality, 22-28 ..	111 to 114	111 to 114	118 to 122	126 to 132
Trams:					
Italy .....	2d quality, 26-28 ..	102 to 107	99 to 106	97 to 105	106 to 114
China (French work) .....	2d quality, 40-45 ..	95 to 99	106 to 110	92 to 96	84 to 93
Grèges:					
Italy .....	2d quality .....	100 to 106	92 to 101	92 to 102	100 to 118
Tsatlée .....	4th market .....	81 to 83	82 to 84	70 to 73	66 to 68
Kahing .....	Nos. 2 and 3 .....	76 to 79	76 to 82	64 to 69	60 to 65
Bengal .....	1st quality, 10-16 ..	80 to 93	90 to 92	74 to 80	74 to 84
Grappes .....	No. 1, 10-16 .....	102 to 106	104 to 106	99 to 104	100 to 106
Canton, tsatlée .....	No. 4 .....	.....	.....	.....	.....

*Comparative prices of silks at Lyons for fifteen years, 1865 to 1879, inclusive—Continued.*

Silks.	Quality.	1869.	1870.	1871.	1872.
<b>Organsins:</b>		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work) ..	1st quality, 22-28 ..	133 to 135	99 to 105	126 to 124	124 to 126
Piedmont (filature and work) ..	1st quality, 22-28 ..	123 to 128	96 to 106	116 to 122	116 to 124
Italy .....	2d quality, 22-28 ..	100 to 110	83 to 96	98 to 105	109 to 112
<b>Trams:</b>					
Italy .....	2d quality, 26-28 ..	98 to 118	85 to 95	96 to 104	98 to 106
China (French work) .....	2d quality, 40-45 ..	82 to 96	80 to 90	92 to 100	85 to 94
<b>Grèges:</b>					
Italy .....	2d quality .....	80 to 110	74 to 88	85 to 105	92 to 106
Tsatlée .....	4th market .....	70 to 72	71 to 73	72 to 74	69 to 71
Kahing .....	Nos. 2 and 3 .....	62 to 67	57 to 65	62 to 72	60 to 66
Bengal .....	1st quality, 10-16 ..	75 to 82	60 to 70	60 to 70	64 to 73
Grappes .....	No. 1, 10-16 .....	88 to 98	72 to 75	75 to 78	76 to 79
Canton, tsatlée .....	No. 4 .....			49 to 52	50 to 52

Silks.	Quality.	1873.	1874.	1875.	1876.
<b>Organsins:</b>		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work) ..	1st quality, 22-28 ..	108 to 112	94 to 98	83 to 90	115 to 125
Piedmont (filature and work) ..	1st quality, 22-28 ..	102 to 106	93 to 97	81 to 85	113 to 118
Italy .....	2d quality, 22-28 ..	90 to 96	72 to 75	70 to 72	102 to 110
<b>Trams:</b>					
Italy .....	2d quality, 26-28 ..	86 to 94	63 to 73	64 to 68	100 to 108
China (French work) .....	2d quality, 40-45 ..	68 to 75	55 to 60	55 to 60	76 to 83
<b>Grèges:</b>					
Italy .....	2d quality .....	80 to 90	60 to 70	56 to 60	100 to 105
Tsatlée .....	4th market .....	52 to 54	42 to 43	42 to 43	71 to 73
Kahing .....	Nos. 2 and 3 .....	44 to 48	34 to 37	36 to 40	57 to 62
Bengal .....	1st quality, 10-16 ..	57 to 62	40 to 42	30 to 36	73 to 78
Grappes .....	No. 1, 10-16 .....	70 to 74	53 to 55	44 to 45	88 to 91
Canton, tsatlée .....	No. 4 .....	38 to 39	31 to 32	30 to 31	43 to 44

Silks.	Quality.	1877.	1878.	1879.
<b>Organsins:</b>		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work) ..	1st quality, 22-28 ..	90 to 92	78 to 80	88 to 85
Piedmont (filature and work) ..	1st quality, 22-28 ..	84 to 88	74 to 75	76 to 80
Italy .....	2d quality, 22-28 ..	86 to 83	66 to 67	72 to 74
<b>Trams:</b>				
Italy .....	2d quality, 26-28 ..	78 to 80	62 to 64	70 to 72
China (French work) .....	2d quality, 40-45 ..	65 to 68	55 to 58	54 to 56
<b>Grèges:</b>				
Italy .....	2d quality .....	74 to 78	56 to 58	66 to 68
Tsatlée .....	4th market .....	52 to 53	42 to 44	45 to 47
Kahing .....	Nos. 2 and 3 .....	44 to 49	39 to 41	43 to 42
Bengal .....	1st quality, 10-16 ..	52 to 56	37 to 40	50 to 51
Grappes .....	No. 1, 10-16 .....	59 to 60	48 to 49	56 to 58
Canton, tsatlée .....	No. 4 .....	35 to 37	30 to 31	35 to 36

*Silks received and conditioned for the market at Lyons for ten years, 1870 to 1879, inclusive.*

Years.	Bales.	Kilograms.
1870 .....	34, 846	2, 319, 606
1871 .....	39, 624	2, 880, 400
1872 .....	45, 595	3, 184, 600
1873 .....	45, 097	3, 081, 700
1874 .....	57, 261	3, 895, 900
1875 .....	65, 855	4, 477, 100
1876 .....	81, 502	5, 675, 200
1877 .....	50, 024	3, 328, 200
1878 .....	62, 123	4, 252, 700
1879 .....	64, 024	4, 421, 400

*Imports and exports of silk and silk goods for seven years, 1873 to 1879, inclusive.*

Years.	Importations.		Exportations.	
	Silks and cocoons.	Silk goods.	Silks and cocoons.	Silk goods.
1873.....	\$70,400,000	\$6,100,000	\$20,040,000	\$95,540,000
1874.....	64,460,000	6,560,000	19,280,000	83,380,000
1875.....	66,020,000	7,440,000	26,600,000	75,140,000
1876.....	108,780,000	7,580,000	34,460,000	59,140,000
1877.....	53,300,000	6,500,000	24,040,000	51,840,000
1878.....	75,480,000	8,380,000	28,480,000	57,740,000
1879.....	60,691,600	7,833,600	29,932,400	47,263,000

*Table showing the movement of silk cocoons at Marseilles for six years, 1874 to 1879, inclusive.*

Years.	Arrivals.	Stock on December 31.
	Kilograms.	Kilograms.
1874.....	1,217,000	658,000
1875.....	904,000	465,000
1876.....	1,002,500	358,400
1877.....	612,500	285,000
1878.....	684,000	511,000
1879.....	1,123,000	586,000

*Fluctuations in prices of silks at Lyons during the year 1879.*

(In francs and per kilogram.)

Description.	Quality.	January 4.	April 4.	July 4.	October 10.	December 5.
<b>Organsins:</b>		<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
France (filature and work)	2d quality, 24-26 ..	70	68 to 70	84	75	73 to 76
Italy (French work) .....	2d quality, 20-22 ..	67	62 to 65	78	68 to 70	72
Bengal (French work) .....	2d quality, 26-30 ..	51	48 to 50	63	58	61
China (French and Italian work) .....	1st quality, 40-45 ..	50	55 to 56	62	58	55
<b>Trams:</b>						
France (filature and work)	2d quality, 20-24 ..	68	67	80	68	70
Italy .....	2d quality, 24-26 ..	63 to 64	61	82	70	69
Bengal (French and Italian work) .....	2d quality, 24-28 ..	53	52	58 to 60	55	60
China (French work) .....	2d quality, 40-45 ..	55	52	58 to 60	53 to 50	54 to 55
<b>Grèges:</b>						
France (knotted ends) .....	2d quality, 10-12 ..	67	62	78	68	71
Italy (unknotted ends) .....	2d quality, 9-11 ..	57	57	75	65	66
Brousa (white knotted ends)	1st quality, 12-14 ..	.....	56 to 59	76	64 to 65	65
China (tsatlées, 4th) .....	.....	43 to 44	41 to 42	49	42 to 44	45 to 47
Japan (grappes, No. 2) .....	.....	44 to 46	43 to 45	58 to 60	51	54

## MARSEILLES.

*Report, by Consul Gould, on the improvements in the port of Marseilles, with statistical tables showing the imports, exports, and navigation for the year 1878.*

Great activity being displayed towards the completion of the new docks and basins of the port of Marseilles, a summary description of the different harbors may not be void of interest.

## THE OLD PORT.

The old port is a natural dock of a rectangular form, running east and west, 890 meters in length, and on an average 320 meters in width. This

harbor, surrounded on every side by high land and houses, and with an entrance only 72 meters wide, although of very easy access, may be considered as one of the safest in the world. A careening basin, situated at the southwest end of the port, 5 meters deep, offers sufficient space for twelve ships to be careened at the same time. Near the entrance to this basin is also a floating dock, in which vessels not over 55 meters long may be repaired.

The insufficient width of this harbor makes it impossible to build transversal piers; the available length of wharves is, in consequence, of no more than 3,000 meters, and sailing vessels, which are alone allowed in the old port, moor alongside the quay to discharge their cargoes, but the lading has to be done by means of lighters and barges.

The sewers have their outlet into the harbor, and make it necessary to keep dredging machines working throughout the year, at a great cost, and breed a constant emanation of mephitic gases, which are especially inconvenient in the warm season, but do not seem to affect the sanitary condition of the city in any perceptible way.

Six hundred vessels, of an average tonnage of 150 tons, may be comfortably located in the old port.

#### THE NEW PORT.

The new port, the construction of which was commenced in the year 1844, is entirely formed by an immense breakwater, extending in a parallel line with the shore, at the distance of from 225 to 520 meters from the mainland. It has a depth of from 12 to 20 meters, and measures 3,070 meters in length. Parapets and batteries are established on this breakwater.

Five basins and two outer ports are hemmed in between the land and the breakwater, as follows:

1. South outer port.

2. Joliette Basin; area 225,610 square meters, depth varying from 6 to 12 meters; wharves, 3,279 meters in length. It is more especially reserved for steamers running regularly from and to Marseilles. It can accommodate 150 vessels of 500 tons.

- 3, 4. Lazaret and Arenc Basins: Area, 208,211 square meters; depth from 7 to 15 meters; wharves 2,500 meters. Sufficient room for 130 vessels of 300 tons. To these two basins are sent all vessels arriving with certain classes of goods which are to be kept in bond, and, in conformity with a privilege granted to the Docks and Entrepôts Company, kept in the storehouses of the said company.

5. The Gare Maritime Basin: Area, 201,585 square meters; depth, from 6 to 15 meters; wharves 1,612 meters. Room for 120 vessels of 300 tons. A pier, which is to be 250 meters long and 90 meters wide, is being built in the middle of this basin.

6. The National Basin, of all the above-mentioned docks, is the only one that is not yet sufficiently advanced to be used. It is anticipated that it will be completed towards the first of July, 1880, and it will then offer a sheltered surface of 486,400 square meters, cut by three piers connected with the mainland; two of those piers will be 240 meters long and 90 meters wide, the third one being 130 meters by 60. Wharves will also be established on a length of 1,500 meters on the mainland, and 900 on the breakwater.

7. The North Outer Port will be formed by the northern end of the breakwater for a distance of about 700 meters.

On the eastern side of the National Basin, and connected with it by a channel 28 meters wide and 92 meters long, is another careening basin lined by four large stone dry docks, as follows:

No. 1. Length, 141 meters; depth, 7 meters.

No. 2. Length, 111 meters; depth, 6 meters.

Nos. 3, 4. Length, 90 meters; depth, 6 meters.

The water is pumped out of these docks by means of powerful steam-engines. Besides the four above-described docks, room has been left open for two more, which would be established at any time in case of need.

A new impulse has been given to the idea of building new basins on the southern shores of Marseilles territory. The principle has been adopted and appropriations have been voted.

There are 162 steamships, of 131,778 tons and 36,085 horse-power, owned by 20 owners or companies, belonging to this port. These steamships run regularly from Marseilles to the following places, viz:

To Algeria, eight departures weekly; to Italy, six weekly; to Corsica and Sardinia, two weekly; to Spain, two weekly; to Cette, nine weekly; to the East and Egypt, four weekly; to the East Indies, two monthly.

Besides these, foreign companies have adopted the port of Marseilles for the terminus of their voyages, and have steamers running regularly to Italy, Spain, England, the East, and the East Indies.

#### FINANCIAL EMBARRASMENTS OF THE CITY.

Important loans had been contracted under the empire in order to meet the expenses incurred by the important works and improvements made in this city at that period. After the overthrow of the empire an imitation of the commune broke out at Marseilles. The rebellion was put down by the armed force at the cost of severe damage to public and private property and loss of lives, originating numerous claims, which amounted to no less than 1,800,000 francs. Under the laws of France all these claims have to be paid by the city in which the damage is done. Placed in presence of all these varied liabilities, the city council are reduced to the most extreme caution in their expenditures, and have to look for new methods of increasing the revenue of the city. The receipts of the "octroi," or town duties, amounted in 1878 to 9,339,768.27 francs. Notwithstanding these comparatively high receipts, new schemes are being formed for increasing them by the establishment of new taxes, or by an extension of the limits within which "octroi" or town duties are collected. Such schemes are naturally not viewed very favorably by the population, and as the sanction of the government, which is requisite for the enforcement of any measure of that nature, is always more or less influenced by public opinion, the city council find themselves placed in a very awkward position between the necessity of meeting the town liabilities and the difficulty of devising efficient and popular means of attaining this object.

J. B. GOULD.

UNITED STATES CONSULATE,  
*Marseilles, October 1, 1879.*



Statement showing the commerce at Marseilles for the year 1878.

## IMPORTS.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
	<i>Met. quin.</i>	<i>France.</i>	<i>France.</i>	
Acids, citric and others ..	12, 562	1, 229, 656	5, 437. 69	England, Germany, Italy, Spain.
Alkalies .....	5, 777	250, 725	15, 282. 61	England, Italy, Barbary States, Spain.
Animals, living:				Italy, Algeria, Argentine Republic.
Horses and colts, 2, 889 head.	5, 440	2, 052, 000	40, 166. 88	Italy.
Hogs, 7, 838 .....	10, 070	1, 038, 164	2, 372. 84	Italy; Algeria, Spain, East Indies.
Horned cattle, 79, 965 ..	279, 200	70, 890, 860	104, 956. 02	Italy, Algeria, Argentine Republic.
Sheep and goats, 621, 964.	155, 505	3, 736, 190	1, 625. 36	Italy, Algeria, Russia, Spain, Greece, Egypt.
Game and poultry .....	7, 956	795, 650	.....	Italy, Algeria, Argentine Republic.
All other .....	944	160, 584	.....	Belgium, Algeria, Germany, England, Italy.
Arms and ammunition .....	7, 682	3, 431, 518	5, 789. 59	England, Italy, Germany.
Bags .....	2, 954	265, 838	3, 114. 12	Spain, Algeria, Italy.
Baskets, and materials for ..	2, 164	197, 642	3, 048. 27	Germany, England, Austria, Italy.
Beer .....	6, 697	304, 908	10, 796. 87	England, Spanish America.
Bitumen .....	49, 069	284, 170	.....	Italy, Spain, Germany, Austria, England.
Books, engravings, &c .....	588	1, 277, 038	402. 91	Turkey, Algeria, Egypt, Russia, Italy.
Bran .....	59, 223	947, 563	853. 16	Russia, Turkey, Barbary States, Algeria, Italy, Spain.
Breadstuffs:				Turkey, Italy, West Coast of Africa, Russia, England.
Barley .....	264, 968	5, 829, 296	.....	Turkey, Argentine Republic, United States, Italy.
Bread and biscuits .....	699	31, 445	846. 67	Russia, Italy, Algeria, Spain, Austria.
Indian corn .....	790, 160	11, 852, 400	.....	Italy, Turkey.
Oats .....	471, 854	10, 369, 788	.....	Russia, Turkey, Algeria, United States, Spain, Italy, &c.
Rye .....	6, 390	121, 410	.....	United States, Italy, Algeria, England, Russia, East Indies.
Wheat .....	6, 441, 678	196, 471, 179	3, 178, 163. 11	Italy, Spain.
Flour and meals .....	9, 936	294, 940	3, 187. 59	Italy, Switzerland, England, Russia, East Indies.
Brooms, all sorts .....	11, 490	114, 890	.....	Belgium.
Building stones and material ..	15, 476	47, 472	.....	Italy, Turkey, Egypt, East Indies, South America.
Buttons .....	2, 147	1, 161, 893	134. 80	Italy, Malta, Turkey.
Cattle bones and horns .....	39, 285	2, 098, 317	2, 674. 26	Switzerland, Germany.
Chestnuts .....	21, 127	676, 071	.....	England, Italy, United States.
Clocks and clock-work, watches, &c.	189	4, 203, 984	493. 89	England, Switzerland, Sweden, United States.
Coal and coke .....	1, 297, 498	2, 727, 638	47, 658. 12	England, French West Indies, Spain, South America.
Coal-tar .....	12, 795	63, 974	.....	England, Brazil, South America, West Indies, East Indies, Africa.
Cocoa and chocolate .....	2, 361	456, 273	126, 271. 18	England, Italy, Spain, Algeria.
Coffee .....	184, 222	36, 844, 372	12, 428, 663. 43	England, Spain, Italy, Egypt, Chili.
Copper:				England, Germany, Belgium, Italy, Algeria, Turkey, China.
Ore .....	3, 780	396, 853	.....	Réunion, Turkey, Algeria, Egypt, Italy, Spain, Sweden, Russia.
Pig and alloyed .....	4, 745	825, 157	337. 45	Spain, Algeria, Italy.
Manufactured and bronze.	405	430, 598	636. 83	Spain, Algeria, Germany, Switzerland.
Old metal and coin .....	11, 616	1, 600, 819	8. 24	Egypt, Turkey, Italy, East Indies, China.
Coral, raw and cut .....	259	179, 530	.....	England, Belgium, Germany, Switzerland, Italy.
Cork bark and manufactures of.	17, 222	2, 100, 430	6, 224. 08	Switzerland, Belgium, Germany, England.
Cotton:				England, Germany, Italy, Switzerland, Spain.
Raw .....	127, 152	8, 900, 662	19. 35	East Indies, Egypt, England, Italy.
Manufactures of .....	58, 526	36, 127, 759	69, 400. 53	Spain, England.
Cutlery .....	157	108, 919	146. 40	
Drugs and chemicals, medicinal, not elsewhere specified.	53, 172	3, 063, 907	17, 246. 78	
Dyestuffs:				
Cashew-nut .....	39, 959	2, 197, 756	527. 66	
Cochineal .....	4, 434	2, 881, 827	54. 94	

Statement showing the commerce at Marseilles, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Dyestuffs—Cont'd.</b>	<i>Met. quin.</i>	<i>Francs.</i>	<i>Francs.</i>	
Gall-nuts .....	13, 022	2, 148, 612	3, 491. 33	Turkey, China, Italy, Austria, Egypt.
Indigo .....	6, 762	5, 747, 292	2, 066. 20	East Indies, Java, England, Egypt.
Madder .....	6, 501	176, 418	.....	Italy, Turkey, Germany.
Saffron .....	451	4, 146, 164	.....	Spain.
Sumac .....	55, 352	2, 429, 098	.....	Italy, Turkey, Austria.
Other, and tan-stuff ..	87, 622	2, 060, 843	2, 227. 41	Germany, Italy, United States, Switzerland, England.
Feathers, ostrich and other.	431	7, 811, 548	350. 48	South America, Russia, Germany, England, Spain, Algeria.
Felt, manufactures of .....	362	143, 984	1, 702. 40	England, Italy, Belgium.
Fibers, textile, not elsewhere specified.	31, 141	2, 335, 301	441. 07	Algeria, China, East Indies, Japan, England.
Fodder .....	9, 556	76, 445	.....	Algeria, Italy.
<b>Fruit:</b>				
Fresh, dried, and preserved.	381, 804	19, 315, 115	405, 860. 01	England, Spain, Italy, Barbary States.
Almonds and nuts .....	56, 110	3, 927, 080	2, 577. 44	Spain, Italy, Portugal, Turkey, Barbary States.
Fruit for distillation .....	6, 125	536, 678	8, 683. 53	Turkey, Italy, Russia, Germany, England.
Furniture .....	2, 793	558, 532	8, 807. 80	Italy, Switzerland, Germany, Turkey, China, United States.
Glassware, all sorts .....	9, 632	1, 160, 364	3, 465. 67	Italy, Switzerland, Germany, Algeria, England.
Gold and platina .....	3	1, 391, 447	28. 35	Turkey, Barbary States, Cochinchina, Algeria, Spain.
Gold coin .....	146	45, 827, 241	149. 81	Turkey, Spain, Egypt, Greece, Malta.
Gums, and extracts of .....	30, 136	6, 440, 862	3, 537. 01	Italy, Spain, Turkey, Algeria, Greece.
<b>Hair:</b>				
Human .....	637	2, 233, 215	.....	Italy, China, Japan.
Animal .....	3, 544	1, 339, 389	830. 47	Russia, Italy, Barbary States, South America, China.
Manufactures of .....	28	63, 384	637. 10	Germany, Austria, Turkey, East Indies, Argentine Republic.
Haberdashery .....	3, 481	2, 472, 602	16, 738. 20	China, Japan, England, Germany, Belgium, Switzerland, Turkey.
Hardware .....	10, 744	982, 290	39, 111. 11	England, Germany, Algeria, Belgium, Barbary States.
Hemp and flax .....	63, 522	6, 692, 298	.....	Italy, Turkey, Egypt, Algeria.
Manufactures of .....	5, 298	2, 074, 418	4, 658. 09	England, Switzerland, Belgium, Germany.
India-rubber, and manufactures of.	6, 642	3, 692, 856	2, 851. 48	West coast of Africa, East Indies, Switzerland, England, Germany, China.
<b>Iron:</b>				
Ore .....	3, 023, 987	6, 047, 974	.....	Algeria, Italy, Spain, Turkey.
Pig .....	22, 609	253, 749	36, 470. 80	England, Italy, Egypt, Turkey.
Scrap .....	52, 772	622, 176	18, 232. 33	England, Belgium, Austria, Germany, Sweden.
Manufactures of .....	37, 361	973, 457	66, 377. 55	Do.
Ivory, tortoise, and pearl shell.	2, 535	3, 887, 966	24. 01	Africa, Greece, Turkey, Barbary States, East Indies.
Jewelry .....	49	7, 385, 698	201. 15	Germany, England, Switzerland, Spain, Turkey.
<b>Jute:</b>				
Manufactures of .....	3, 617	162, 777	.....	England, Italy, Germany.
<b>Lead:</b>				
Ore .....	108, 257	2, 706, 430	.....	Spain, Italy, Greece, Turkey, Barbary States, Algeria.
Pig .....	166, 580	7, 497, 108	.....	Spain, Italy, Greece, England.
Old and manufactured .....	237	11, 675	15. 30	Algeria, England, Switzerland, Germany.
<b>Leather .....</b>	<b>3, 834</b>	<b>5, 092, 417</b>	<b>18, 951. 77</b>	<b>Italy, Algeria, Germany, Belgium, East Indies, Turkey, England.</b>
Manufactures of .....	1, 660	590, 539	703. 89	Switzerland, Belgium, Italy, Germany, Barbary States, Algeria.
<b>Machinery, and implements for.</b>	<b>5, 797</b>	<b>986, 789</b>	<b>14, 030. 67</b>	<b>England, Switzerland, Germany, Belgium.</b>
Manganese .....	119, 493	1, 194, 928	.....	Italy, Spain.
Mannes .....	20, 846	305, 197	.....	Greece, Turkey, Barbary States.
Marble and alabaster .....	45, 160	693, 992	13, 679. 19	Italy, Spain, Switzerland.
Matches .....	3, 421	415, 978	.....	Spain, Barbary States, Italy, China, East Indies, Russia, Turkey.
Mats of all sorts .....	18, 413	45, 140, 232	20, 121. 76	

Statement showing the commerce at Marseilles, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
	<i>Met. quin.</i>	<i>Francs.</i>	<i>Francs.</i>	
Medicinal roots and bark.	26, 076	4, 970, 791	38, 110. 08	Turkey, Barbary States, East Indies, Russia, Austria, Egypt, Algeria.
Miscellaneous .....	243, 511	35, 124, 012	36, 443. 65	
Metals and ores, n. e. s., and manufactures.	4, 774	238, 273	514. 71	
Needles .....	114	169, 480	49. 20	Germany, Belgium, England.
Nets for fisheries .....	110	22, 072		Italy, Spain.
Oil-cakes .....	2, 751	38, 514		Italy, Turkey, Senegal.
Oils:				
Olive .....	92, 082	16, 114, 376	183, 712. 33	Italy, Spain, Turkey, Algeria, Greece.
Seed, and other fixed.	182, 162	15, 866, 460	354, 820. 17	United States, England, Italy, East Indies, West Coast of Africa.
Essential and perfumed.	292	813, 325	22, 639. 09	England, Italy, China, Switzerland, Germany.
Petroleum, crude .....	88, 786	3, 107, 520	2, 123, 043. 46	United States, England, Russia.
Petroleum, refined .....	4, 279	237, 333	877. 93	United States.
Essences and other mineral.	1, 297	34, 514	29, 684. 27	United States, Italy, England, Switzerland, Spain.
Fish and train .....	3, 075	300, 685	3, 741. 06	Greece, Norway, Holland, Newfoundland.
Olive husks .....	120, 794	5, 435, 752		Spain, Turkey, Italy, Portugal, Austria.
Paints .....	10, 879	414, 204	1, 736. 65	England, Germany, Switzerland, Belgium, Egypt, Italy.
Paper, all sorts .....	4, 749	621, 591	1, 377. 06	
Pasteboard .....	1, 138	212, 352	269. 36	Germany, Italy, Russia.
Pepper .....	26, 845	3, 221, 442	1, 521, 120. 45	England, East Indies, Cochinchina, Greece, England, Italy, Switzerland, Belgium, Turkey.
Potteries and earthenware	10, 221	583, 125	1, 814. 05	Italy, Switzerland, Turkey, England, Greece, Belgium, China.
Porcelain .....	421	236, 361	8, 603. 14	Switzerland, Italy, Turkey, England.
Provisions:				
Butter, fresh and salt.	6, 603	1, 980, 882	72. 19	Switzerland, Germany, Holland, England.
Cheese .....	16, 997	2, 719, 563	37, 402. 53	Russia, Italy, Turkey, Barbary States.
Eggs .....	16, 419	2, 298, 655		Newfoundland, England, Spain, Italy, Turkey.
Fish, fresh, salt, and dried.	43, 621	2, 717, 691	5, 835. 07	Algeria, England, Spain, Turkey.
Fish, in oil .....	5, 127	1, 133, 321	2, 749. 25	United States, South America, Italy, England.
Grease and lard .....	39, 867	11, 362, 007	577. 75	United States, England, Italy, Argentine Republic, Spain.
Meat, fresh and salt .....	2, 009	216, 510	860. 62	United States, Russia, England, Spain, Italy, Turkey.
Salt pork .....	19, 737	4, 440, 736	63, 825. 99	Italy, Algeria, Spain.
Paste .....	3, 195	255, 585	4, 093. 57	Malta, Algeria, Turkey.
Potatoes .....	14, 460	130, 142		Greece, Italy, Holland, Switzerland.
Vegetables, fresh, salt, and preserved.	31, 933	521, 039	866. 02	Turkey, Italy, Russia, Austria, Belgium, Norway, Algeria.
Vegetables, dried .....	263, 997	9, 503, 787		Italy, Germany, Greece, Turkey.
All other, n. e. s. ....	777	157, 139		Turkey, Egypt, Algeria, Italy, Russia, Barbary States.
Rags and old junk .....	39, 691	1, 693, 081		China, East Indies, Algeria, Barbary States, Italy, Turkey.
Rattans and rush .....	23, 552	768, 392	2. 19	Italy, Cochinchina, England, Egypt, East Indies.
Rice .....	108, 214	5, 518, 835	54, 352. 90	Spain, Italy, Algeria, Austria, England.
Ropes, all sorts .....	6, 776	617, 523	9, 192. 20	United States, England, Norway, Russia.
Rosin, tar, pitch, and turpentine.	45, 113	667, 003	39. 71	Italy, Algeria, Spain.
Sago and julep .....	11, 114	777, 900	14, 576. 13	Peru, East Indies, Belgium, England, Germany.
Salt-peter and soda .....	62, 345	3, 117, 256	2, 004. 45	East Indies, coast of Africa, Turkey, England, Spain, Algeria, Italy.
Seeds:				
Oleaginous .....	2, 337, 650	78, 672, 910	4, 454. 66	Turkey, Russia, Italy, Algeria, Spain.
Canary and millet .....	41, 249	882, 013		Turkey, England, Italy, Barbary States, Algeria.
All other .....	2, 190	351, 321		England, Italy, Austria, Algeria, Egypt.
Ships' apparel, chains, anchors.	579	28, 936	93. 12	

Statement showing the commerce at Marseilles, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>Silk:</b>	<i>Met. quin.</i>	<i>Francs.</i>	<i>Francs.</i>	
Cocoons .....	13, 795	22, 071, 760	128. 65	Russia, Italy, Turkey, China, Japan, Algeria.
Eggs of silk-worms..	669	13, 376, 400	.....	Spain, Italy, Turkey, Japan.
Raw and floss silk ...	53, 183	216, 937, 313	2, 096. 72	East Indies, China, Japan, Italy, Turkey, Russia, Spain.
Manufactures of .....	1, 084	11, 876, 895	897. 36	China, East Indies, Switzerland, England, Germany, Belgium.
<b>Silver:</b>				Argentine Republic, Turkey, Algeria.
Ore .....	59	5, 852	.....	Barbary States, England, Spain, Cochinchina, Japan, East India.
Metal and coin .....	1, 163	23, 261, 631	981. 49	United States, South America, Italy, Algeria, Russia, Africa.
<b>Skins, untanned and prepared.</b>	171, 612	46, 022, 190	26, 283. 13	England, East Indies, Egypt.
Spices, n. e. s. ....	6, 381	2, 267, 183	154, 500. 12	Barbary States, Greece, Turkey.
Sponges .....	1, 147	183, 536	34, 140. 87	Austria, Belgium, England.
Steel, and manufactures of	5, 508	387, 007	2, 781. 80	East Indies, China, Italy.
Stones, n. e. s. ....	14, 854	545, 146	1, 528. 38	Do.
Straw hats .....	1, 090	6, 108, 720	7, 945. 32	
<b>Sugar:</b>				
Raw .....	518, 792	28, 533, 558	21, 594, 958. 68	French West Indies, East Indies, Mauritius.
Refined, sirup, confectionery.	1, 770	346, 529	12, 521. 26	French West Indies, East Indies, Switzerland, England, Turkey, Italy.
<b>Sulphur:</b>				Italy, Spain, Algeria.
Brimstone and pyrites	244, 926	3, 666, 470	.....	Do.
Refined .....	1, 224	31, 293	.....	Russia, United States, South America, East Indies, England.
Tallow .....	104, 341	12, 520, 969	5. 34	China, Japan, Cochinchina, England.
<b>Tea</b> .....	17, 073	8, 986, 555	98, 383. 88	East Indies, England, Egypt.
<b>Tin:</b>				England, Germany, Switzerland.
Ore .....	11, 082	1, 939, 410	1, 014. 01	
Metal, and manufactures of.	282	116, 275	27. 00	
<b>Tobacco:</b>				
Leaves and cut .....	74, 246	8, 909, 552	33, 096. 43	Turkey, United States, Germany, Italy, Algeria, Belgium, England.
Prepared .....	2, 950	542, 257	21, 679. 10	Germany, Switzerland, England, Algeria, United States.
<b>Tools</b> .....	765	170, 111	224. 16	Germany, Holland, Switzerland, Belgium, Australia.
<b>Toys and fancy goods.</b>	1, 303	282, 634	5, 744. 90	Switzerland, Germany, Turkey, Italy.
<b>Vanilla</b> .....	126	638, 200	12, 536. 31	Mauritius, Réunion, Cochinchina, England.
<b>Wax</b> .....	4, 798	1, 871, 075	2, 303. 53	Turkey, Italy, Barbary States, Africa, East Indies, Algeria.
<b>Wearing-apparel</b> .....	1, 372	923, 400	15, 343. 56	England, Italy, Spain, China, Belgium, Japan.
<b>Wines:</b>				Spain, Italy, Turkey, Algeria.
Ordinary .....	150, 173	7, 022, 808	308, 144. 02	Spain, Italy, Holland, Portugal, England.
Table and liqueurs .....	29, 533	2, 870, 837	78, 493. 51	United States, Germany, Spain, Greece, Belgium, Holland.
Spirits of wine and alcohol.	90, 920	6, 418, 068	8, 040. 59	French West Indies, England, Germany, United States.
Rum and tafia .....	8, 476	988, 858	6, 498. 73	Sweden, Russia, Italy, Austria, Canada, United States.
<b>Wood:</b>				Russia, Algeria, Turkey, Africa.
Ordinary .....	745, 369	102, 65, 103	1, 027. 19	Mexico, Africa, East Indies, West Indies, Turkey, Spain.
Cabinet and veneer .....	21, 935	739, 567	3, 793. 72	Austria, United States, Canada.
Dyeing and odoriferous.	80, 105	1, 324, 472	1, 220. 48	Italy, Spain, England, Turkey, Belgium.
Staves .....	148, 033	4, 911, 714	.....	Russia, Spain, Italy, Greece, Turkey, Egypt, Barbary States, South America.
Manufactures of .....	1, 944	318, 077	5, 308. 92	Germany, Belgium, Switzerland, England, Turkey, Egypt.
<b>Wool:</b>				Germany, Egypt, Uruguay, England.
Raw .....	186, 143	33, 598, 064	2, 711. 57	Egypt, Algeria, Uruguay, Italy, Germany.
Manufactures of .....	7, 261	10, 699, 507	28, 794. 90	Germany, Switzerland.
<b>Zinc:</b>				
Ore and metal .....	732	37, 488	.....	
Old .....	1, 124	11, 230	.....	
Manufactures of .....	35	17, 440	7. 00	
<b>Total</b> .....	21, 630, 795	1, 340, 154, 066	43, 799, 451. 09	

NOTE.—The above amount of duties was paid on a quantity of 18,193,139 metrical quintals. The remainder was imported either for re-exportation or in transitu.

Statement showing the commerce of *Marseilles, &c.*—Continued.

## EXPORTS.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Met. quin.</i>	<i>France.</i>	
Acids .....	33, 281	2, 125, 709	Russia, Holland, England, Spain.
Alkalies .....	68, 749	1, 581, 689	Spain, Algeria, Italy, Turkey.
Animals, living:			
Hogs .....	3, 119	270, 410	Spain, Italy.
Game and poultry .....	211	84, 429	Spain, Africa, South America.
All others .....	1, 100	280, 858	Algeria, Italy, South America.
Antimony (ore and metal) .....	5, 096	95, 964	England, Algeria, Spain, Italy.
Arms and ammunition .....	9, 770	2, 755, 813	Algeria, Spain, Italy, Africa.
Baskets .....	3, 021	641, 648	Algeria, South America, Spain, Italy.
Beer .....	6, 155	215, 406	Algeria, Spain, Turkey, Egypt, Asia.
Bitumen .....	25, 066	743, 551	England, Italy, Turkey, Algeria.
Bran .....	26, 171	434, 897	Spain, Italy, Algeria, Switzerland.
Bread and breadstuffs:			
Bread and biscuit .....	11, 653	524, 385	Turkey, Italy, West Coast of Africa.
Barley .....	111, 612	2, 511, 270	Algeria, Barbary States, Spain, Senegal.
Indian corn .....	268, 463	4, 026, 945	Spain, Algeria, Barbary States, Egypt.
Oats .....	24, 482	588, 605	Switzerland, Turkey, Germany, West Indies.
Wheat .....	339, 061	11, 510, 900	Italy, Algeria, Spain, Malta, Portugal.
Other grain .....	1, 816	36, 320	Spain, Italy, Switzerland.
Flour of wheat .....	377, 491	14, 099, 640	Algeria, Malta, Spain, Switzerland, Asia.
Flour, all others .....	389	9, 725	Algeria, Italy, Barbary States.
Bricks, tiles, and other clay work .....	351, 074	1, 510, 443	West Indies, Algeria, Russia, Turkey.
Building material and stones .....	712, 882	1, 154, 256	Algeria, Russia, Turkey, Egypt, Barbary States.
Books, engravings, and photographs .....	3, 626	3, 005, 698	Algeria, Spain, Italy, Greece, Turkey.
Candles .....	35, 020	6, 815, 543	Algeria, Turkey, Egypt, Italy, Spain.
Cattle bones and horns .....	1, 470	119, 770	Italy, Spain, Algeria, England.
Clocks and clockwork .....	714	3, 579, 824	Algeria, Italy, Spain, Turkey, Russia.
Cocoa and chocolate .....	2, 555	660, 200	Spain, Italy, Algeria, Switzerland, England.
Coffee .....	112, 753	23, 339, 982	Turkey, Italy, Algeria, Greece, Russia.
Coral, raw and cut .....	271	1, 131, 433	Italy, Algeria, Barbary States.
Coal and coke .....	3, 689, 128	10, 160, 638	Italy, Turkey, Greece, Egypt, Spain.
Cork, bark and manufactured .....	6, 330	1, 365, 016	Italy, South America, Africa, East Indies.
Cotton:			
Raw .....	58, 906	9, 622, 987	Spain, Italy, England, Switzerland.
Tissues, thread, and manufactured .....	110, 089	61, 153, 259	Turkey, China, Algeria, Africa, East Indies.
Copper:			
Ore .....	2, 943	88, 315	England.
Metal and alloyage .....	11, 084	2, 275, 312	Italy, England.
Manufactured .....	4, 517	4, 280, 115	Algeria, Egypt, Turkey, Italy.
Old metal .....	1, 640	237, 322	Italy, Spain, England.
Cutlery .....	1, 280	895, 832	Algeria, Spain, Italy, Turkey.
Dyestuffs:			
Madder .....	11, 458	377, 797	United States, Italy, England.
Gall-nuts .....	5, 129	846, 224	Italy, England, Belgium, Spain.
Saffron .....	380	3, 500, 784	East Indies, Japan, England, Italy.
All others, n. e. s. .....	30, 773	5, 001, 955	Turkey, Egypt, Algeria, Spain.
Drugs, chemicals and medicine, n. e. s. .....	109, 359	16, 448, 273	Italy, Spain, Algeria, Africa, West Indies.
Feathers, ostrich and others .....	62	1, 676, 445	Spain, Italy, Algeria.
Felt, manufactures of .....	2, 106	1, 961, 017	Algeria, Spain, Italy, West Coast of Africa.
Fish:			
Salt and dried and shell .....	33, 856	2, 572, 784	Italy, Algeria, Greece, Egypt, Turkey.
In oil .....	14, 130	3, 082, 946	Turkey, Russia, Algeria, Egypt, East Indies.
Fodder .....	38, 936	350, 422	Spain, Algeria, Italy, England.
Fruit:			
Fresh, dried, and preserved .....	21, 890	2, 741, 810	England, Turkey, Switzerland, Germany.
Raisins and figs .....	18, 016	1, 080, 960	Egypt, Barbary States, Turkey, Italy.
Nuts, almonds, chestnuts .....	28, 008	1, 841, 905	England, Algeria, Egypt, United States.
Furniture .....	3, 555	2, 711, 083	Algeria, Turkey, Egypt, Spain, Greece.
Fibers, textile, n. e. s. .....	12, 592	1, 007, 411	Italy, England, Russia, Greece, South America.
Glassware .....	94, 740	7, 677, 547	Italy, Spain, Turkey, Algeria, Greece.
Gold, metal and coin .....	863	59, 598, 217	Algeria, England, Turkey, Egypt, South America.
Gums and extracts of .....	18, 919	2, 833, 380	Italy, Spain, Turkey, England, Germany.
Haberdashery .....	24, 561	18, 237, 745	Turkey, Cochinchina, Algeria, Japan, England.
Hair, and manufactures of .....	7, 931	2, 423, 787	Algeria, Italy, Spain, Germany, England.
Hemp and linen .....	13, 335	1, 506, 280	Spain, England, Turkey, Algeria, Germany.
Hemp, and manufactures of .....	17, 176	9, 766, 830	Turkey, Russia, Algeria, Italy, Spain.

Statement showing the commerce of *Marseilles, &c.*—Continued.

## EXPORTS—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
<i>India rubber, and manufactures of.</i>	<i>Met. quin.</i> 6,502	<i>Francs.</i> 2,789,920	England, Spain, Egypt.
<i>Instruments, scientific and musical.</i>	6,837	1,944,611	Turkey, Spain, Italy, Egypt, Algeria.
<i>Iron:</i>			
<i>Ore</i> .....	2,022	1,415	England, Spain.
<i>Pig, bar, sheet, &amp;c</i> .....	112,027	1,776,582	United States, England, Algeria, Asia.
<i>Manufactures of</i> .....	63,581	4,819,525	South America, East Indies, Algeria.
<i>Ivory, pearls, and tortoise shell.</i>	1,055	3,950,166	Turkey, Egypt, East Indies, Italy.
<i>Jewelry</i> .....	170	13,718,000	Algeria, Spain, Turkey, Egypt.
<i>Jewelry, plated</i> .....	279	612,722	Algeria, Barbary States, South America.
<i>Jute</i> .....	2,476	126,818	Spain, England, Egypt.
<i>Jute, manufactures of.</i>	13,662	1,821,583	Algeria, Turkey, West Coast of Africa, Greece.
<i>Lead:</i>			
<i>Ore</i> .....	4,077	101,686	England, Italy, Egypt, Spain.
<i>Pig, sheet, old</i> .....	58,930	2,670,629	Russia, China, Italy, Turkey, Algeria.
<i>Manufactures of</i> .....	34,520	3,280,000	Turkey, Greece, Barbary States, England.
<i>Leather and tanned skins</i> .....	25,609	26,199,583	Turkey, Algeria, Spain, Greece, Egypt.
<i>Leather, manufactures of</i> .....	10,773	31,383,217	Turkey, Africa, Algeria, England.
<i>Liquorice, roots and juice</i> .....	5,860	654,537	England, Holland, Italy, United States.
<i>Machinery and implements</i> .....	21,001	2,307,299	Algeria, Spain, Turkey, Italy, Japan.
<i>Marble</i> .....	11,386	558,742	Spain, British and South America, China, East Indies.
<i>Matches</i> .....	5,528	1,658,562	South America, Algeria, Barbary States.
<i>Manures, all sorts</i> .....	25,037	390,516	Spain, Italy, West Indies, Algeria.
<i>Medicinal plants, barks, &amp;c.</i> .....	17,240	4,318,706	Spain, Italy, Turkey, Russia, United States.
<i>Metals, manufactures of, n. e. s</i> .....	602	86,760	Algeria, Spain, Italy.
<i>Millinery</i> .....	951	1,902,691	Turkey, Italy, Egypt, Russia, East Indies.
<i>Miscellaneous</i> .....	48,312	4,081,264	Russia, Turkey, Algeria, China, England.
<i>Mustard seed, and prepared</i> .....	4,086	1,354,552	
<i>Oils:</i>			
<i>Olive</i> .....	44,876	7,851,392	United States, West Indies, Russia, Turkey.
<i>Seed</i> .....	124,663	11,299,134	Algeria, Italy, Spain, Africa, South America.
<i>Perfumed, and all others</i> .....	5,049	1,540,696	Italy, Spain, England, Algeria, Russia.
<i>Cakes</i> .....	245,679	3,439,500	England, Holland, West Indies, Belgium.
<i>Oxides</i> .....	5,345	317,860	Spain, Italy, Algeria, Japan, Turkey.
<i>Paints, all sorts</i> .....	28,048	154,850,086	Russia, Italy, Spain, Turkey.
<i>Paper, pasteboard, and manufactures of.</i>	50,569	6,079,977	Algeria, Turkey, Egypt, Spain, South America.
<i>Perfumery</i> .....	3,577	1,902,876	Turkey, Algeria, West Indies, United States.
<i>Potteries and earthenware</i> .....	45,264	1,942,442	Algeria, Turkey, Spain, East and West Indies.
<i>Porcelain</i> .....	5,697	1,386,638	Italy, Spain, Algeria.
<i>Provisions:</i>			
<i>Butter, fresh and salt</i> .....	3,649	1,099,941	Algeria, Egypt, Turkey, Greece.
<i>Cheese</i> .....	21,609	3,560,760	Algeria, Egypt, Turkey, Greece, Spain, Asia.
<i>Grease and lard</i> .....	20,511	3,017,982	Spain, Italy, Algeria, West Indies.
<i>Paste</i> .....	42,355	3,176,643	Algeria, Switzerland, Spain, Germany.
<i>Potatoes</i> .....	209,952	2,099,522	Turkey, Egypt, Spain, South America.
<i>Salt pork and other meats</i> .....	10,735	1,035,355	Algeria, French colonies, Egypt, Italy.
<i>Vegetables, fresh and preserved.</i>	11,204	400,049	Algeria, South America, West Indies.
<i>Dried</i> .....	136,289	2,228,985	Spain, Algeria, West Indies, Russia.
<i>All others</i> .....	2,963	1,209,806	Algeria, Spain, Italy.
<i>Rags and old junk</i> .....	14,354	934,307	England, Spain, United States, Turkey.
<i>Rattans and rush</i> .....	3,974	87,424	England, Italy, Austria.
<i>Rice</i> .....	56,357	2,817,850	Algeria, Turkey, Egypt, West Indies, Africa.
<i>Ropes, all sorts</i> .....	10,766	1,269,144	Algeria, Turkey, Egypt, Africa.
<i>Salt</i> .....	243,532	340,942	South America, East and West Indies, United States.
<i>Silk:</i>			
<i>Cocoons</i> .....	4,240	6,360,675	Italy, Spain, Turkey, United States.
<i>Eggs of silk-worm</i> .....	607	13,650,750	Italy, Spain, Turkey.
<i>Raw</i> .....	12,819	63,041,445	England, Turkey, Spain, Algeria, Barbary States.
<i>Manufactures, all sorts</i> .....	1,925	21,843,112	Algeria, Egypt, Italy, England, East Indies.
<i>Skins and hides, fresh, salt, and dried.</i>	62,398	12,927,947	Spain, Italy, United States, Algeria, England.
<i>Shoe-blackening</i> .....	11,261	900,895	Turkey, Russia, Algeria, Greece, Spain.
<i>Seeds:</i>			
<i>Canary and millet</i> .....	10,312	232,794	United States, Italy, Africa, Spain, England.
<i>Oleaginous</i> .....	27,337	1,057,025	Italy, Algeria, Turkey, Egypt, Spain, Russia.

Statement showing the commerce of Marseilles, &amp;c.—Continued.

## EXPORTS—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
<b>Seeds—Continued.</b>	<i>Met. quin.</i>	<i>France.</i>	
Of plants .....	2, 039	427, 480	Algeria, United States, Egypt, Turkey, Spain.
Ships' apparel, tar and anchors .....	12, 131	373, 373	Turkey, Algeria, Japan, Russia, Spain.
Ships and boats .....	775	160, 000	Italy, Algeria.
Silver:			
Ore .....	40	4, 050	Spain, East Indies.
Metal and coin .....	996	19, 907, 400	Mauritius, East Indies, Japan.
Soap, ordinary .....	72, 418	4, 707, 195	United States, Africa, Turkey, Italy.
Spices (pepper excepted) .....	4, 041	1, 039, 578	Turkey, Mexico, Spain, Italy, England.
Spices, pepper .....	17, 711	2, 125, 300	Turkey, Austria, Italy, England, Egypt.
Steel, and manufactures of .....	28, 044	1, 562, 593	Spain, Italy, Algeria.
Stores of all sorts, n. e. s. ....	15, 584	2, 639, 740	Spain, Italy, Japan, Algeria, Turkey.
Stationery, ink, &c .....	2, 821	582, 305	Algeria, Turkey, Spain, Italy, Egypt.
Sponges .....	497	994, 060	England, Spain, Italy, Algeria, United States.
Sugar:			
Raw .....	18, 406	1, 217, 535	Italy, Switzerland, Turkey, Algeria, England, East Indies.
Refined .....	402, 487	45, 302, 621	South America, West Indies, Africa, Barbary States, Egypt.
Sirup, molasses .....	8, 701	1, 700, 391	Algeria, Italy, Turkey, Switzerland, Egypt, Spain, West Coast of Africa.
Sulphur and brimstone .....	43, 477	1, 029, 472	East Indies, Spain, Portugal, Russia, Algeria.
Tea .....	16, 746	9, 210, 426	England, Russia, Spain, Switzerland, Turkey.
Tin, and manufactures of .....	5, 300	1, 178, 605	Turkey, Algeria, Spain, Holland, Russia.
Tobacco .....	44, 558	4, 937, 525	Malta, Gibraltar, Africa, Russia, Algeria.
Tools .....	15, 477	2, 581, 053	Algeria, Spain, Italy, Turkey, Egypt.
Toys .....	8, 001	4, 000, 465	Algeria, Turkey, East Indies, Greece.
Vinegar .....	8, 994	72, 734	Italy, South America, West Indies.
Waters, mineral .....	13, 388	133, 878	Algeria, Italy, Turkey, Egypt, South America.
Wax .....	2, 190	854, 380	Spain, Italy, England, Switzerland, Turkey.
Wearing apparel .....	11, 271	24, 054, 046	Algeria, Turkey, Egypt, Italy, Greece.
Wines and spirits:			
Ordinary wine .....	327, 717	16, 953, 264	South America, Egypt, United States, &c.
Rum and tafia .....	5, 357	652, 215	West Coast of Africa, Austria, Spain, Algeria.
Spirits of wine and alcohol .....	100, 085	8, 538, 728	West Coast of Africa, Spain, Italy, Egypt.
Other liqueurs .....	30, 633	4, 468, 978	Algeria, Turkey, England, East Indies.
Wood:			
Ordinary .....	37, 123	572, 373	Barbary States, Algeria, Spain, Italy.
Cabinet .....	12, 049	603, 177	Russia, Italy, Algeria, England, United States.
Dyeing .....	20, 604	42, 071	Austria, England, Italy, Spain, Egypt.
Manufactures of .....	5, 273	1, 815, 178	Algeria, Egypt, Turkey, Spain.
Wool:			
Raw .....	22, 237	5, 999, 491	United States, Italy, England, Spain.
Manufactures of .....	41, 456	63, 385, 550	Algeria, Spain, Italy, Japan, South America.
Zinc, ore, metal and manufactures of .....	11, 149	961, 893	Turkey, Algeria, Italy, Egypt, England.
<b>Total .....</b>	<b>10, 260, 968</b>	<b>1, 005, 351, 799</b>	

## NAVIGATION AT MARSEILLES.

Table showing the proportion between ships of different flags.

Flag.	ENTERED.			
	Long sea voyages.		Coasting.	
	Number.	Tonnage.	Number.	Tonnage.
Austrian .....	40	16,425	144	49,254
Belgian .....			14	14,903
British .....	126	82,035	416	306,385
Danish .....	5	892	7	2,780
Dutch .....	3	3,206	17	12,029
German .....	12	4,133	59	30,406
Greek .....	29	7,892	309	87,482
Italian .....	134	74,880	1,513	367,296
Russian .....	4	1,410	17	8,404
Spanish .....	25	3,522	405	80,804
Swedish and Norwegian .....	33	14,422	73	25,564
Turk .....			7	1,255
United States .....	46	25,333	2	541
Sundry .....	2	1,372	14	9,261
Foreign flag .....	459	235,522	2,997	996,404
French .....	348	214,307	4,903	1,707,326
Total .....	807	449,829	7,900	2,703,730

Flag.	CLEARED.			
	Long sea voyages.		Coasting.	
	Number.	Tonnage.	Number.	Tonnage.
Austrian .....	39	15,789	136	45,024
Belgian .....	1	978	13	14,347
British .....	63	29,824	465	347,483
Danish .....	8	2,366	3	1,140
Dutch .....			18	14,713
German .....	22	8,295	42	23,819
Greek .....	15	3,954	341	96,403
Italian .....	119	57,600	1,580	387,458
Russian .....	1	280	10	4,760
Spanish .....	17	4,729	262	52,745
Swedish and Norwegian .....	46	17,553	57	22,004
Turk .....			6	1,008
United States .....	36	19,762	15	7,055
Sundry .....	5	2,077	49	22,220
Foreign flag .....	373	163,207	2,997	1,040,129
French .....	323	200,758	4,952	1,728,223
Total .....	696	363,965	7,949	2,768,352

Table showing the proportion between sailing and steam ships.

Flag.	CLEARED.			
	Steamships.		Sailingships.	
	Number.	Tonnage.	Number.	Tonnage.
French:				
Long sea voyages .....	79	121,234	244	80,575
Coasting .....	2,840	1,495,438	2,113	232,724
	2,919	1,616,672	2,357	313,309
Foreign:				
Long sea voyages .....	27	27,223	346	135,934
Coasting .....	913	637,109	2,064	403,020
	940	664,382	2,430	538,954
Total .....	3,859	2,281,054	4,787	852,263



## NAVIGATION AT MARSEILLES.—Continued.

Table showing the proportion between sailing and steam ships—Continued.

## ENTERED.

Flag.	Steamships.		Sailing ships.	
	Number.	Tonnage.	Number.	Tonnage.
French:				
Long sea voyages .....	82	128, 234	266	86, 973
Coasting .....	2, 827	1, 481, 691	2, 076	225, 635
	2, 909	1, 609, 925	2, 342	311, 708
Foreign:				
Long sea voyages .....	90	121, 100	369	114, 422
Coasting .....	861	559, 282	2, 136	437, 123
	951	680, 382	2, 505	551, 544
Total .....	3, 860	2, 290, 307	4, 847	863, 252

Table indicating the entire movement for long sea voyages, steam and sail, with the countries from whence arrived.

## SAILING SHIPS.

Whence arrived.	French.		Belonging to country from whence arrived.		Not belonging to country from whence arrived.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
French West Indies .....	36	10, 563			23	5, 613
Foreign West Indies .....	4	1, 168	*9	1, 858	7	1, 796
United States of America .....	29	8, 501	41	22, 861	95	45, 474
Mexico and Central America .....	18	4, 967	3	567	19	4, 258
Brazil and La Plata .....	1	502			17	4, 837
West Coast of Africa .....	126	51, 708			113	34, 706
East Coast of Africa .....	7	2, 666			2	569
East Indies, China, and Japan .....	33	14, 522	†22	11, 434	16	7, 110
Pacific Ocean .....	1	1, 009				
Sundry .....			2	694	2	304
Total .....	265	95, 606	77	37, 414	294	104, 667

\* Spanish flag.

† British flag.

## STEAMSHIPS AND GRAND TOTAL.

Whence arrived.	French.		Belonging to the country from whence arrived.		Not belonging to the country from whence arrived.		Grand total steam and sail navigation.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
French West Indies .....					1	451	62	17, 193
Foreign West Indies .....							18	4, 256
United States of America .....					3	3, 364	178	80, 200
Mexico and Central America .....							40	9, 792
Brazil and La Plata .....	12	22, 043			16	16, 473	46	43, 855
West Coast of Africa .....	40	29, 875			9	6, 572	288	122, 961
East Coast of Africa .....	2	2, 211					11	5, 446
East Indies, China, and Japan .....	29	64, 572	*37	42, 309	22	24, 272	159	164, 219
Pacific Ocean .....							1	1, 009
Sundry .....							4	968
Total .....	83	118, 701	37	42, 309	51	51, 132	807	449, 820

\* British flag.

## NANTES.

*Six statistical tables, prepared by Mr. Gifford, commercial agent, showing the commerce and navigation at the port of Nantes for the year ending December 31, 1878.*

## 1.—IMPORTS.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
	<i>Met. quint.</i>			
Sugar, colonial.....	329, 268	\$3, 500, 095	\$2, 209, 918	Guadeloupe, Martinique.
Sugar, raw, foreign.....	144, 885	1, 611, 644	1, 214, 618	Dutch Indies, Mauritius, Cuba, Brazil.
Wood, common.....	180, 790	735, 927	119	Sweden, Norway, Germany, North America.
Coffee.....	18, 761	701, 671	578, 274	Holland, Venezuela, Hayti, Mexico.
Iron, cast iron, and steel.....	150, 561	492, 302	78, 344	England, Sweden, Norway.
Cacao.....	9, 734	438, 048	52, 837	New Grenada, Brazil, Martinique.
Manures.....	94, 382	283, 173	.....	Holland, England, Portugal.
Olive oil.....	10, 483	270, 468	6, 241	Italy, Algiers.
Lead.....	27, 271	207, 257	.....	Spain, England, Italy.
Coal.....	529, 476	192, 729	11, 805	England.
Fruits, table.....	22, 172	188, 724	4, 791	Spain, Portugal, Turkey.
Grease, lard, and tallow.....	7, 210	144, 209	60	United States, England.
Tin, raw.....	4, 038	122, 129	2, 324	England, Holland, Germany.
Cheese.....	3, 748	112, 427	2, 995	Holland, England, Switzerland, Germany.
Wines.....	10, 236	99, 270	8, 554	Spain, Italy.
Hemp.....	5, 166	98, 150	23	England, Russia, Germany.
Stone and earth used in arts and industries.....	82, 863	86, 649	38	England, Germany.
Tissues of cotton.....	931	85, 431	129	Do.
Flax.....	3, 697	85, 031	.....	Russia.
Cotton, wool.....	3, 025	82, 753	.....	England, Réunion.
Arachides.....	15, 939	79, 695	.....	West Coast of Africa.
Cereals.....	11, 020	65, 120	271	United States, England.
Pepper.....	2, 517	57, 882	146, 597	British East Indies.
Caoutchouc and gutta-percha.....	627	49, 657	.....	East Indies.
Codfish, dry and salt.....	3, 994	49, 526	.....	England.
Rice.....	8, 197	49, 263	155	British East Indies, Holland.
Bones and hoofs.....	12, 228	46, 465	.....	Spain, Turkey.
Vanilla.....	34	33, 820	803	Mexico, Guadeloupe.
Cloves.....	495	33, 653	3, 775	England, Réunion.
Mother-of-pearl and pearl shells.....	609	33, 470	608	England.
Vessels, iron.....	3, 460	32, 870	138	Do.
Sesame seed.....	3, 013	27, 723	.....	British East Indies.
Lichens.....	1, 477	26, 578	.....	Guadeloupe.
Feathers.....	141	26, 532	99	England.
Oats.....	6, 109	25, 047	.....	Do.
Copper.....	743	23, 192	55	England, Holland, New Grenada.
Sal ammoniac.....	1, 901	19, 023	.....	England.
Butter.....	307	18, 102	.....	Holland.
Rum and tafia.....	1, 115	17, 529	175	England, Martinique, Cayenne.
Palm oil.....	885	15, 405	569	West Coast of Africa.
Other articles.....	41, 998	307, 736	17, 610	
Total in 1878.....	1, 755, 504	10, 576, 375	4, 341, 925	
Total in 1877.....	1, 969, 699	11, 526, 548	3, 840, 377	
Increase in 1878.....			501, 548	
Decrease in 1878.....	214, 195	950, 173		

## 2.—EXPORTS.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Met. quin.</i>		
Sugar, refined.....	61, 437	\$843, 065	England, Sweden, Norway.
Cereals, grain and flour.....	84, 306	631, 283	England, Sweden, Belgium, Holland.
Tools and implements in metal.....	12, 483	190, 927	French colonies, Brazil.
Wood, common.....	62, 092	183, 521	England.
Rice.....	13, 178	142, 322	French colonies.
Potatoes and dried vegetables.....	57, 615	135, 947	Spain, English and Spanish possessions.
Fish preserved in oil.....	2, 379	94, 100	Germany, England, United States.
Grease (raw tallow and lard).....	4, 392	87, 841	French colonies, Mauritius.
Manufactures of skin or leather.....	172	79, 425	Cayenne, New Grenada, Mexico.
Engines and machinery.....	3, 404	76, 387	French colonies, Brazil.
Tissues, laces, and ribbons of flax or hemp.....	679	75, 142	Cayenne, New Grenada, Mexico.

*Six statistical tables showing the commerce and navigation at Nantes, &c.—Continued.*

2.—EXPORTS—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
	<i>Met. quin.</i>		
Paper, books, and engravings.....	3,929	\$67,697	England, Sweden, Spanish America.
Tissues of cotton.....	887	66,933	Cayenne, New Grenada, Mexico.
Meat, salted.....	1,912	50,385	Cayenne, England, Réunion.
Paints of all sorts.....	7,176	49,665	French colonies.
Cordage of hemp.....	1,528	45,832	Cayenne, New Grenada, Mexico.
Iron, cast iron, and steel.....	10,069	43,885	England, Spanish and French colonies.
Butter.....	923	42,467	England.
Sal ammoniac, raw, in powder.....	4,183	40,991	French colonies.
Mules.....	528	36,960	Do.
Brandy, spirits, and liqueurs.....	1,044	36,736	England, Sweden, Norway.
Pottery and glassware.....	4,789	36,577	England, Germany.
Molasses.....	9,855	35,477	Sweden, Norway.
Manures.....	11,217	33,741	England.
Wines.....	3,487	33,076	England, Sweden, Norway.
Weaving apparel and pieces of sewed linen.....	153	29,459	Mexico, New Grenada, Venezuela.
Braids of straw for matting.....	214	27,435	French colonies.
Building material.....	28,082	26,616	French colonies, England, Germany.
Nitrate of potash.....	1,707	18,434	England.
Skins, prepared.....	84	18,068	Cayenne, New Grenada, Venezuela.
Mercery.....	74	17,275	England, Germany.
Coal.....	44,846	11,660	Steamers.
Other articles.....	28,019	301,101	
Total, 1878.....	466,837	3,610,430	
Total, 1877.....	1,060,375	8,286,901	
Decrease in 1878.....	593,538	4,676,471	

3.—Navigation by countries, 1878.

From and to—	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
Russia.....	21	6,855	.....	.....
Sweden.....	65	15,130	2	259
Norway.....	16	3,572	9	1,381
Denmark.....	1	244	.....	.....
Germany.....	43	10,148	5	575
Holland.....	13	1,508	.....	.....
England.....	898	260,040	444	61,514
English possessions.....	23	12,066	6	1,840
Dutch possessions.....	11	5,571	.....	.....
Belgium.....	8	989	2	137
French possessions.....	68	23,718	65	18,679
Portugal.....	12	1,411	2	367
Spain.....	46	4,586	.....	.....
Spanish possessions.....	6	1,432	10	2,951
Italy.....	8	1,973	.....	.....
Austria.....	6	1,135	.....	.....
Turkey.....	6	2,025	.....	.....
West Coast of Africa.....	19	6,582	3	928
Mauritius.....	7	3,358	8	2,579
Barbary States.....	.....	.....	2	331
Cochin China and Siam.....	.....	.....	2	796
United States.....	60	35,197	.....	.....
Haiti.....	3	716	.....	.....
United States of Colombia.....	13	28,641	13	27,333
Brazil.....	6	1,630	6	1,349
Peru.....	4	3,506	.....	.....
Mexico.....	12	22,663	12	23,238
Total loaded.....	1,475	454,723	591	144,251
Total in ballast.....	31	13,290	1,076	333,878
Grand total, 1878.....	1,506	468,013	1,667	478,129
Grand total, 1877.....	1,551	446,996	1,594	465,031
Increase in 1878.....	.....	21,017	73	13,098
Decrease in 1878.....	45	.....	.....	.....

4.—Statement showing the number and tonnage of French and foreign vessels, including their repeated voyages, that entered and cleared with cargoes and in ballast from and to foreign countries and French Possessions at the port of Nantes during the year 1878.

From and to—	Entered.		Cleared.	
	Vessels.	Tons.	Vessels.	Tons.
Russia.....	21	6,855	.....	.....
Sweden.....	65	15,130	2	259
Norway.....	16	3,572	9	1,381
Denmark.....	1	244	.....	.....
Germany.....	43	10,148	5	575
Holland.....	13	1,508	.....	.....
England.....	998	260,046	444	61,514
English Possessions.....	23	12,086	6	1,840
Dutch Possessions.....	11	5,571	.....	.....
Belgium.....	8	989	2	137
French Possessions.....	68	23,718	65	18,679
Portugal.....	12	1,411	2	367
Spain.....	46	4,586	.....	.....
Spanish Possessions.....	6	1,432	10	2,951
Italy.....	8	1,973	.....	.....
Austria.....	6	1,185	.....	.....
Turkey.....	6	2,025	.....	.....
Western Coast of Africa.....	19	6,542	3	923
Mauritius.....	7	3,359	8	2,579
Barbary States.....	.....	.....	2	331
Cochin China and Siam.....	.....	.....	2	795
United States.....	60	35,197	.....	.....
Hayti.....	8	716	.....	.....
United States of Colombia.....	13	28,641	13	27,333
Brazil.....	6	1,630	6	1,849
Peru.....	4	3,506	.....	.....
Mexico.....	12	22,663	12	23,233
Total loaded.....	1,475	454,723	591	144,251
Total in ballast.....	31	13,296	1,076	333,878
Grand total, 1878.....	1,506	468,013	1,607	478,129
Grand total, 1877.....	1,551	446,996	1,594	465,931
Increase in 1878.....	.....	21,017	73	18,098
Decrease in 1878.....	45	.....	.....	.....

## 5.—NAVIGATION BY FLAG, YEAR 1878.

Statement of the number and tonnage of vessels of each nation that entered and cleared at the port of Nantes during the year 1878.

Vessels with cargoes bearing the flag of—	Entered.		Cleared.	
	No.	Tonnage.	No.	Tonnage.
England.....	358	137,394	129	27,868
Sweden.....	17	5,846	4	788
Norway.....	74	30,546	3	652
Germany.....	45	12,858	6	910
Holland.....	24	3,120	6	865
Denmark.....	13	2,255	.....	.....
Spain.....	4	961	.....	.....
Portugal.....	1	288	1	288
Italy.....	6	2,697	.....	.....
Austria.....	8	4,156	.....	.....
United States.....	2	823	1	405
Russia.....	2	834	1	251
Total with cargoes.....	554	201,517	151	32,022
Total in ballast.....	29	13,244	442	180,078
Grand total.....	583	214,761	593	312,100
Total, year 1877.....	601	218,821	605	217,562
Decrease in 1878.....	18	3,560	12	5,462

6.—*Declared exports to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for year ending September 30, 1878.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Sardines and preserves .....	\$339 68	\$66 20	\$7,570 96	\$78,790 11	\$86,768 97
Plants .....		4,116 64			4,116 64
Wines .....				506 81	506 81
Leather .....		145 49	1,224 80		1,370 29
Stained glass .....			258 00		258 00
Wooden shoes .....		31 20			31 20
Miscellaneous .....				165 21	165 21
Total .....	339 68	4,350 53	9,064 47	79,522 13	93,285 81

GEORGE GIFFORD.

UNITED STATES COMMERCIAL AGENCY, *Nantes*, October 24, 1879.

## NICE.

*Report, by Consul Vesey, on the trade of Nice for the years 1878 and 1879.*

I have the honor to transmit herewith statements showing the exports from and imports to the port of Nice during the year ending December 31, 1878, together with a statement of the number of vessels entered and cleared during the same period.

I have much satisfaction in asking the attention of the Department to the fact of a direct trade in wheat having lately sprung up between the United States and this consular district. The province of the Alpes Maritimes does not, even when the harvests are most favorable, produce more grain than will suffice for one month's consumption. The population, therefore, relies chiefly on importations, which have hitherto been entirely from Russia, Italy, and Turkey. Within the last few months, however, importers have sought the American market for a part of their supplies, and the consequence has been that two cargoes of wheat have come here direct from Philadelphia, and another is now on its way.

The quantity imported this year is certainly not very considerable (about 25,000 bushels), but it is the beginning of what will, I trust, be a remunerative if not very extensive trade, and will prove to the inhabitants of this part of France that should the usual channels of their supplies fail them they can turn to the United States with the certainty of finding abundance.

The American wheat, though highly esteemed, is not at present used by itself for flour, but is mixed with that produced in Europe and then ground. The average price for American, Russian, and Italian grain is \$1.20 per bushel, and could American producers afford to sell it here at a lower rate I have little doubt that they would find this a profitable market.

I regret that it is not in my power to recommend the shipment of any other article from the United States. The merchants here look to the large ports of entry, such as Marseilles, Genoa, and Havre, for their supplies, nor does the difference in freight tempt them to give orders for direct shipment.

Nice and the neighboring towns of Cannes and Menton are neither manufacturing nor commercial centers. The difficulty of obtaining coal

in sufficient quantities may account for the lack of manufacturing enterprise, and the want of good harbors for large vessels for the almost total absence of direct trade.

While, therefore, other cities of France derive their importance from one or more of these three causes—commerce, trade, and agriculture—Nice owes its present flourishing condition entirely to its climate. This is exceptionally mild, and the fact of thousands of visitors spending every winter here is in itself sufficiently significant.

The winter of 1878-'79, however, was for Nice, as, indeed for the whole of Europe, an exceptional one, both as regards the lowness of the temperature and the unusual rainfall; and the observations, taken by competent authorities, have shown the great difference existing between the temperature of last winter and those preceding it. Thus, the barometer, during the winter of 1878-'79, averaged 29.7, whereas, during the 28 former years it is shown to have been over 29.9, while the mean temperature which, during the same period of 28 winters, was 51.0 Fahr., was last winter not more than 49.3 Fahr.

The serenity of the atmosphere was proportionately affected. During the winter months this city generally enjoys an average of 97.2 fine days; during the same period last year, however, there were but 75, while the cloudy and rainy days were 105, as compared to a usual average of 97.9. These unfavorable atmospheric conditions, due to a general depression of the temperature throughout Europe, did not, however, materially influence either the sanitary condition or the general prosperity of this city. The standard of public health remained exceptionally high, while between the months of December and March the large influx of visitors rendered accommodation difficult to obtain.

I take the liberty of mentioning these facts to the Department, as I am desirous of showing that this city, though not commercially important, yet, through the number and wealth of those who make it their winter resort, has attained a degree of importance and prosperity unsurpassed by any other city of the same size in France.

W. H. VESEY.

UNITED STATES CONSULATE,  
*Nice, October 6, 1879.*

*Statements prepared by Consul Vesey, showing the commerce and navigation at Nice during the year ending December 31, 1876.*

## IMPORTS.

Articles.	Quantity.	Whence.	Value.
Horses ..... head.	300	Italy, France	\$30,000
Mules ..... do.	110	Italy	5,500
Oxen ..... do.	15,020	Italy, Corsica	115,000
Cows ..... do.	4,050	Italy	100,000
Calves ..... do.	7,025	do	105,000
Sheep ..... do.	56,000	do	280,000
Hogs ..... do.	8,000	do	81,000
Salt meat ..... pounds	50,000	Nantes	11,000
Cheese ..... do.	320,000	Italy, France	64,000
Stockfish ..... do.	400,000	Norway	38,000
Wheat ..... bushels	700,000	Russia, Italy, Turkey	840,000
Do ..... do.	25,000	United States	30,000
Flour ..... pounds	605,000	Marseilles	324,000
Rice ..... do.	2,500,000	Italy	125,000
Maccaroni ..... do.	120,000	do	24,000
Macarubes ..... do.	2,200,000	Italy, Spain	24,000
Olive-oil ..... gallons	850,000	do	840,000
Coal ..... tons	12,000	England, France	96,000
Iron, in bars ..... do.	5,000	England, Sweden	440,000
Sugar ..... pounds	250,000	Havana	128,000
Coffee ..... do.	110,000	Martinique	40,000
Fresh meat ..... do.	800,000	France, Italy	240,000
Butter ..... do.	700,000	do	228,000
Eggs ..... do.	3,500,000	Italy	35,000
Corn ..... pounds	3,150,000	do	58,150
Oats ..... do.	1,500,000	Russia	81,150
Maize-flour ..... do.	260,000	Italy	4,120
Vegetables, dried ..... do.	400,100	France	28,000
Fruit ..... do.	1,500,000	do	90,000
Bran ..... do.	450,000	do	6,800
Hemp ..... do.	500,000	France, Italy	70,000
Cork ..... do.	30,000	Africa, France	1,700
Staves ..... do.	1,500,000	Naples	74,000
Wood ..... pounds	1,500,000	Italy, Switzerland	450,000
Wine ..... gallons	970,150	France, Italy	485,000
Total .....			5,632,640

## EXPORTS.

Horses ..... head.	50	France	\$5,180
Mules ..... do.	60	do	3,650
Oxen ..... do.	350	do	24,500
Cows ..... do.	120	do	4,750
Calves ..... do.	700	do	8,700
Sheep ..... do.	1,100	do	6,600
Swine ..... do.	900	do	9,300
Wool ..... pounds	130,000	do	20,000
Grease ..... do.	20,000	do	1,720
Flour ..... do.	120,000	do	4,000
Corn ..... do.	3,000	do	50
Semola ..... do.	1,700,000	do	102,000
Vegetables ..... do.	180,000	do	10,050
Maccaroni ..... do.	150,000	do	13,500
Fruit ..... do.	120,000	do	73,000
Olive-oil ..... gallons	970,000	All parts of the world	1,164,000
Fire-wood ..... tons	580	France	8,000
Tiles and bricks ..... pieces	2,500,000	Italy, France	15,000
Perfumery ..... do.		United States, Germany, England	237,000
Soap ..... pounds	140,000	France	13,000
Wine ..... gallons	210,000	do	109,120
Liqueurs ..... do.	150	do	600
Pottery ..... pieces	500,000	Italy, France	20,000
Skins ..... pounds	120,000	France	71,120
Cork ..... do.	35,000	do	2,400
Coals ..... tons	5,120	Steamer use	42,000
Total .....			2,063,150

Statement showing the navigation at the port of Nice for the year ending December 31, 1878.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
French .....	Russia .....			3	633	3	633
	England .....			11	1,815	11	1,815
	Spain .....			9	524	9	524
	Italy .....	2	14	2	86	4	50
	Canada .....			1	433	1	433
	Algeria .....			4	333	4	333
Italian .....	Coasting .....	206	49,584	537	17,769	743	67,353
	Russia .....			25	8,585	25	8,585
	Turkey .....			3	356	3	356
	England .....			2	714	2	714
	Spain .....			4	242	4	242
	Austria .....	4	2,600			4	2,600
Greek .....	Italy .....	21	7,837	322	15,782	343	23,619
	Malta .....						
	Greece .....						
	Russia .....			3	795	3	795
	Turkey .....			2	563	2	563
	Greece .....						
English .....	Cape of Good Hope .....						
	Russia .....	1	606			1	606
	England .....	1	479	13	5,281	14	5,760
	Canada .....			1	305	1	305
	Portugal .....						
	Spain .....						
Austrian .....	Italy .....						
	Turkey .....						
	Algeria .....						
	Russia .....			2	378	2	378
	Austria .....			7	2,246	7	2,246
	Sweden .....			2	627	2	627
Norwegian .....	Norway .....			1	242	1	242
	Italy .....						
	Germany .....	1	583			1	583
	Turkey .....						
	Spain .....			12	741	12	741
	Italy .....						
Total .....		236	61,708	966	58,400	1,202	120,108

Flag.	To—	CLEARED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
French .....	Russia .....			1	125	1	125
	England .....			1	102	1	102
	Spain .....			6	305	6	305
	Italy .....	41	11,513	20	2,458	61	13,971
	Canada .....						
	Algeria .....						
Italian .....	Coasting .....	164	37,282	542	17,277	706	54,559
	Russia .....						
	Turkey .....			12	4,448	12	4,448
	England .....			1	425	1	425
	Spain .....			3	1,182	3	1,182
	Austria .....	1	304	1	227	2	531
Greek .....	Italy .....	23	9,829	303	15,616	326	25,445
	Malta .....			16	1,595	16	1,595
	Greece .....			1	328	1	328
	Russia .....			1	287	1	287
	Turkey .....			2	465	2	465
	Greece .....			1	77	1	77
English .....	Cape of Good Hope .....			1	294	1	294
	Russia .....						
	England .....						
	Canada .....			2	1,076	2	1,076
	Portugal .....			1	437	1	437
	Spain .....			3	1,673	3	1,673



*Statement showing the navigation at the port of Nice, &c.—Continued.*

Flag.	To—	CLEARED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
English—Cont'd	Italy	1	606			1	606
	Turkey	1	479			3	1,104
	Algeria			2	825	4	1,357
Austrian	Russia			4	1,357		
	Austria						
Norwegian	Sweden			8	974	3	974
	Norway						
	Italy			1	242	1	242
Swedish	Germany						
	Turkey	1	588			1	588
Spanish	Spain			4	214	4	214
	Italy			3	187	3	187
Total		232	60,601	935	51,995	1,167	112,596

## PARIS.

### *Report by Consul Fairchild.*

*Budget voted for the city of Paris for the year 1879.*

#### ORDINARY EXPENSES.

Municipal debt	\$21,269,196
To the state—cost of collection by agents of the treasury—and restitution of unduly collected taxes	837,780
Octroi	1,367,948
Préfecture	1,028,538
Pensions and reliefs	129,268
Mairies of the various arrondissements, (wards)	146,100
Administration of the domain of the city, of markets, &c	254,223
Church	8,723
Burials	204,522
Military, fire department, station-houses, and guard-houses	113,160
City's proportion in maintenance of the garde républicaine	625,260
Administration of works of Paris	212,203
Architecture and fine arts	947,483
Inspection of buildings, streets, &c	850,960
Streets, &c	3,270,150
Promenades, parks, lighting, conveyances, &c	1,670,910
Water-works, sewers, scavenging, and street-cleaning	1,622,528
College Rollin, &c	184,779
Education	2,276,441
Public charities—insane, foundling, and other institutions	2,860,940
Divers expenses	43,964
Préfecture of police	4,370,926
Supplemental allowances	20,000
Reserve fund	429,168
Extraordinary expenses—general funds	952,157
Total	\$45,697,067

The receipts of the octroi of Paris—that is to say, the tolls collected upon various articles entering the city—amounted in 1877 to \$25,079,608, and in 1878 to \$26,434,956. A detailed statement of these receipts is herewith presented:

*Receipts of the "octroi" 1877 and 1878.*

Sources of receipts.	1878.	1877.
Liquors, &c.....	\$12,791,363	\$11,927,451
Alcohols.....	14,211	12,281
Liquids other than liquors.....	2,591,022	2,391,776
Food.....	5,073,442	4,655,190
Animals.....	1,516	1,354
Fuel.....	2,165,114	1,994,644
Building material.....	1,245,683	1,523,781
Timber.....	911,441	932,944
Horse-feed, &c.....	846,577	837,836
Miscellaneous.....	652,120	665,253
Centimes.....	1,430	1,258
Warehouse admission fees.....	51,640	49,340
Warehouse subscription fees.....	75,688	72,992
Stamps.....	13,760	13,510
Total.....	26,434,957	25,079,610
Gain in 1878.....		1,355,347

The expenses of the octroi, as per budget for 1878, were fixed at \$1,251,547, being about 5 per cent. of the receipts.

LUCIUS FAIRCHILD.

UNITED STATES CONSULATE-GENERAL,  
Paris, December 13, 1879.

## ROUEN.

*Report by Mr. Rhodes, commercial agent, on the trade of Rouen, with the United States, for the year ending September 30, 1879.*

The duty on foreign beef cattle, introduced into France, is 3½ francs per head. The pasture grounds of Normandy and Calvados offer advantages for fattening stock, and with this insignificant duty there appears to be an opening for those wishing to engage in the transportation of American cattle to the ports of Rouen and Havre. The killing of cattle on debarkment does not furnish wholesome meat, the sea-sickness and confinement to which they are subjected on the voyage requiring that they should have a month or two of recuperation. A shipment of 130 head was recently landed in Normandy, but I have not learned whether they were slaughtered on arrival or not.

At the ports of Rouen and Dunkirk, as elsewhere in France, the receipts of American wheat and corn have been considerably augmented the present year. It is believed that the wheat crop of France this year will be something less than it was last, namely, 261,994,418 bushels. It was thought for a time that the yield would be still less, but the crop in the northwest is not as bad as was feared. The departments of the north furnish more than one-fourth of this product—those of the northwest being the most important.

Two or three months ago a cargo of wheat came here from Australia, and, if it was an average sample, shows a quality considerably inferior to the American. The cargo in question was a losing venture, but it remains to be seen whether the experiment will be repeated. The most serious competition to America in this cereal comes from the shores of the Black Sea.

The demands in Rouen and Dunkirk for wheat, corn, and petroleum are well understood by the merchants in the United States, but there

are others which might be entertained with considerable profit for such articles as barley for brewing, pease, white beans, and flaxseed.

As a rule, the American machinery that is introduced into this part of the country, such as street-car wheels, pump engines, &c., comes through England on account of less duties.

The business of selling American meat has already existed for some time in Rouen; some of it has been found fair, and a portion not to be compared with the native meat. These occasional sales of an inferior quality have restricted this commerce and will prevent an extension of it unless the transporters find a remedy. In the summer months the sales cease. American canned meat is well known and finds a ready sale.

If manufacturers of American machinery were to send circulars printed in French to this agency, or the chamber of commerce of Rouen, for distribution, it would probably extend their business.

A. RHODES.

UNITED STATES COMMERCIAL AGENCY,  
Rouen, October 1, 1879.

*Statement showing the imports and exports between Rouen and the United States for the year ending June 30, 1879.*

Articles.	Imports.		Exports.	
	Amount.	Value.	Amount.	Value.
Wheat ..... pounds.	82, 941, 698	\$2, 282, 046	.....	.....
Indian corn ..... do.	84, 819, 463	1, 156, 628	.....	.....
Petroleum* ..... do.	9, 244, 593	.....	.....	.....
Cotton ..... do.	3, 526, 677	493, 724	.....	.....
Coal ..... value.	.....	.....	.....	\$1, 000 00

\* Is only sold after being refined, hence it is difficult to give the crude a market value here.

### SWITZERLAND.

*Report of Vice-Consul Doerr, of Basle, on the commerce and industries of Switzerland for the year ending September 30, 1879.*

#### RIBBON MANUFACTURE.

There having been almost sufficient work, and most of the looms having been going during the whole of the year, the workmen (more especially the lace and fringe makers) have reason to be pretty well satisfied; the more so, considering the state of trade in other branches of industry in Switzerland and in other countries.

The manufacturer has had harder times to go through than those who worked with their hands. The complaints which have arisen in different quarters are but too fully justified. On the one hand the fashions change very quickly, and no sooner has a manufacturer produced some new article which, in his opinion, shall command a rapid sale, than it has been thrown into the shade by some new pattern, perhaps merely a different combination of colors or a different texture. On the other hand, as a consequence of this, orders came in only for small quantities, and with but a short time for delivery, so that fresh orders had always to be sought after.

As a result of this, conjoined with the fluctuation in prices for silk,

which toward the end of the year fell more and more, the manufacturer's prices stood very low, varying considerably in different factories. Orders were, nevertheless, given up to October, and in the month of August, even, a slight rise was noticeable. From September, however, prices fell again; the chief customer, England, keeping far behind, extremely little business was done during the last months. In plain ribbons the best customer has, this year, still been England. For figured ribbons there was rather a greater demand. The Jacquard looms were constantly at work; but, unfortunately, it was not possible to obtain as much of the article as was in demand, the number of Jacquard looms being comparatively small.

#### RAW-SILK TRADE.

The last year was one of very few fluctuations. Unfortunately, however, the prices showed a steady downward tendency, so that this year must be looked upon as a most unprofitable one for manufacturers, dealers, and agents. The hopes of better prospects entertained toward the end of 1877 were not realized. During the months of January and February there was almost a dead-lock in business; in March, however, a greater demand was visible, and this continued till August. Thereafter business remained very dull till the end of 1878. The consumption having, from October, 1877, become on the whole pretty steady, the equilibrium between supply and demand might have been re-established if it had not been necessary to dispose of smaller and larger quantities of silk which had remained over from the unfortunate year 1876. At the commencement of the harvest of 1878 the amount of stock accumulated was, however, not too heavy, but still large enough, so that as the prospects in Italy were good it was to be expected that the prices for European and Asiatic silks would become cheap, and at last impart a sound basis to business.

But these hopes were blasted, for the injury sustained by the silk crop in France was used as a pretense for spreading erroneous ideas regarding the Italian crop. The amount produced in Europe was rated too low, and the prices paid were much too high. This was at once telegraphed to the East, and as the second crop in Canton and Shanghai had turned out badly, the desire for speculation was greatly excited among the Chinese, especially in Shanghai, where a single mandarin bought a quantity of 7,000 bales, whereby the prices were kept at a fictitious height till September. The quantities of Italian silk, however, which were offered for sale, soon showed an excess of supply over demand quite incompatible with first crop estimates. On the matter being sifted it turned out that instead of 27,580,000 kilos of cocoons for Italy, as announced by the silk merchants of Lyons, the amount of 37,201,703 kilos was given by the "*Associazione dell' industria e del commercio delle sete in Italia*" as the real amount. This calculation, based on exact estimates, explains, of course, the continued supply and the fall in price. China and Japan are necessarily influenced by the reports from Europe, but not being in possession of an overwhelming quantity of silk, and, in fact, most likely not in a position to come up to a quantity equal to that exported last year, prices have mostly been too high as against the quantity produced in Europe. As in the establishments for drying silk elsewhere so also in Basle, the year 1878 shows an increase over its predecessor, namely, 251,256 kilos, against 229,869 kilos in 1877. Among the first named were 110,787 kilos organzin, 123,673 kilos tram, and 16,786 kilos grège.

## FLORET SPINNING.

The year 1878 may, on the whole, be regarded as rather favorable for floret spinning, for, on the one hand, the consumption became somewhat greater, and consequently stood in a better proportion to the produce; and, on the other hand, the weavers, by carefully selecting the raw material, were able in selling to obtain moderate advances. Still the year cannot be considered as a good one. It began with rather high prices for the raw material and low prices for yarn. Not much business being done, the prices of frisons and cocoons advanced only from 1 to 1½ francs per kilo, and that of yarn from 3 to 4 francs per kilo. In consequence of the treaty of peace between Russia and Turkey, there was, during the months of April and May, a greater request for chappe, and as this article during the summer was largely used in the making of velvet and materials for ladies' costumes, an advance in the price of yarn from 2 to 2½ francs per kilo was experienced, notwithstanding the large extent of the silk crop. This rising in price lasted, however, only for a short time, and at the end of the year the market stood almost at the same level as before. The threatening attitude of England was a constant barrier to any decided improvement, and the English bank crisis also served as a warning, tending to make everybody careful, and even timid, in the use of money. This state of feeling was keenly felt in this branch through a falling off in the demand. In November, however, a slight improvement took place. The consumption of chappe, though not inconsiderable, was less than in the good years before, as well as in 1877. But towards the end of the year much more business was done in this article, giving rise to several notable transactions.

"*Fringe-twist*," for deep black, and used by lace and fringe makers generally, was for a time in demand, but the sale soon became dull, and the quantity sold was very variable.

"*Sewing silk*," of which a very superior quality is here manufactured, is a favorite article of regular consumption, but, in comparison with the total amount produced, only of moderate importance.

"*Fontarts*," as regards Basle, deserve attention only in so far as, through last year's failure in this article, the competition on the part of French spinners, who almost exclusively supply the "*cannettes*" necessary for this manufacture, was more felt. The quantity of chappe and twist produced by the spinners of Basle and vicinity amounts to about 70,000 kilos. Of this amount, according to the official returns, 205,004 kilos were exported to France (in 1877, 127,456 kilos). In reference to Germany, no official returns are available, the article having been at that time free of duty; however, it may be assumed that by far the greatest part of the remaining quantity is consumed there. Whether the new customs policy of the imperial chancellor shall exercise a detrimental influence on this export, or whether the threatening cloud looming in the distance shall again disappear, will soon be apparent.

## WOOL.

As concerning this article, the following points may be noticed: During the first three months of the year, there was no considerable change in the prices; they fell before the shearing time, in April and May, and remained low during the first half of the buying season. Towards the end of June, however, there was a greater demand, and the prices advanced and remained high till a reaction came, toward the latter part of September; from that time till the end of the year all prices declined. The raw material was then 8 to 10 per cent. cheaper, according to kind

than at the beginning of the year, or from 20 to 30 per cent. under the average of the last ten years. The increased briskness of trade, which happened towards the middle of the year, may be partly accounted for by the considerable sales of yarn and manufactured goods destined for Russia; the German worsted-yarn spinners were also enabled from June till September to keep up the price of yarn, which had advanced some 10 per cent.; there was, however, but little improvement in the cloth manufacture during this time. In England and France people were then expecting an increase of business, an expectation in which they were disappointed, and after October the financial catastrophes which had taken place in England pressed heavily on the country. Cheap wools were still more neglected during the remainder of the year than they had been in the spring, while fine and superfine kinds were in greater demand, and secured in comparison better prices.

During the past year, worsted yarn was more largely used by the cloth manufacturers than formerly. Although the circumstances were in many ways unfavorable, it may well be said that the wool manufacture did not suffer as much as several other branches.

#### DYEING.

The business done here in dyeing was in 1878 as unfortunate as was also the case in the previous year. An entire stoppage of trade, and then an overwhelming amount of very urgent work, followed each other in succession. In general, colored ribbons seemed to be more fashionable, while black ribbons were neglected, and in consequence of this the dyers in black, and particularly in deep black, had very little to do. The continual preference of the public for cheap articles made the manufacture of materials mixed with cotton more general, and thus most of the cotton dyers were tolerably busy. There has been a considerable decline in the price of aniline colors, drugs, soap, coal, &c., during the past year, caused partly by the introduction of new and more economical methods of manufacture, and partly by the dullness of trade and overproduction. The price of dyeing kept pace only too well with this reduction in the value of the necessary raw material, and particularly in cotton dyeing, in which certainly a great improvement has been made during the last year; the competition was very close, and consequently the prices of dyeing came down to a minimum.

The wages of the better workmen remained the same, while among the commoner class, and especially among the dyers in black, a reduction in the weekly wages here and there took place.

In the year 1878, the amount dyed for ribbon and silk factories together, amounted to 408,296 kilos (1877, 387,913 kilos) silk, 157,736 kilos (1877, 171,532 kilos) chappe, and 92,872 kilos cotton.

#### WATCHES.

From Pruntrut, at the northwest corner of Switzerland, to the lower extremity of Lake Lemman in the extreme southwest, and from the frontier river Doubs down to the Jura Lakes and still farther, the watch manufacture once flourished as the most important branch of Swiss industry. The manufacture was carried on by able, well-to-do men, and wages were so high that a good workman could earn from 10 to 20 francs a day. Only first-rate work was produced. The orders from foreign countries, especially from England and America, came in direct. This continued to be the case up to the beginning of the seventh decade (1860–1870) of our century. Then it was that impure elements got mixed up in this branch

of business; consequently a great part of this valuable branch of industry, or, to speak more correctly, of the trade in its productions became tainted, and watches of quite an inferior quality were brought into the market. In this way the greatest damage was done to the reputation of Swiss watchmaking; its star gradually sank and, at the Philadelphia exhibition the feeling seemed to be general that in the face of the productions brought forth by the competition of other countries, particularly of the United States and France, this branch of Swiss industry would be entirely destroyed. These apprehensions, however, were not realized. The better class of manufacturers met together, consulted, and sought by careful work and the use of all the improvements made by art and science to regain their former prestige and, by summoning up all their strength, to compete successfully with other nations. These efforts were not made in vain. Orders came in again, workshops were enlivened, and better times would have dawned for the tried watchmaking population, if the general dullness of trade and want of employment had not pressed heavily upon and hindered every attempt at improvement. It is, however, to be expected that a removal and suppression, as far as possible, of inferior work, will be the happy result of this crisis.

The position which Swiss watchmaking took at the Paris exhibition, has made up for much of the evil that had been done at Philadelphia, and Mr. Perret, the judge for awards in the watchmaking department, calls this exhibition a triumph, proving anew that, if the Swiss watchmakers would but keep up their confidence, courage, and energy, nothing could hinder them from taking up and carrying to a successful issue the industrial and commercial contest both in the present and in the future.

#### MACHINERY.

The last year may, on the whole, be looked upon as most unsatisfactory, and even at its close no prospect of improvement could be seen. The price of raw material continued to decline, English pig-iron from 10 to 15 per cent., and bar-iron about 7 per cent. It is, however, to be hoped that this backward movement which has been noticed for several years will soon come to an end, as the blast-furnaces and foundries will stop, rather than work on at a loss. In England, this result has already been reached, and a great number of furnaces are now idle there. The wholesale trade, which gives employment to so many workmen, has terribly suffered, because of the stagnation in the market, and thus no new machines have been produced. As to war-material and that required for railways, no great purchases have been made; on the contrary, the railway companies seem more disposed to break up the old rails rather than lay down any new ones.

Under these circumstances, the machine trade must have recourse to exportation, which, however, is unfortunately rendered most difficult by the duty imposts by which Switzerland is hemmed in. Germany, after having abolished the import duty on iron and machines, introduced it again. Italy is on the point of raising the duty; France and Austria have already pretty high conditions, and exportation to Russia has been rendered most difficult by high duty, and still more by the unfavorable rate of exchange.

#### THE IRON TRADE.

Those who began the past year with high hopes, and with, at least, a certain surety of the stability of the prices already so low, were thoroughly deceived. The prices were not only not stable, but in them a

reducing tendency made itself constantly felt; the decrease in price of raw iron, after many fluctuations during the year, amounting to 15 per cent., and wrought iron from 4 to 7 per cent., according to the place of production, is a reduction, which, by the otherwise so unfavorable state of this branch of industry, weighs very heavily, and especially so, as it is only to be met by the greatest sacrifices, with no immediate improvement to be expected. This bad condition of the iron trade is evident from the fact that in the year 1872, and even in the first months of 1873 the same price was paid for one cwt. as is now paid for two. Thus a reduction of fully 50 per cent. has taken place, a phenomenon, which is as seldom as it is deplorable.

Turning to the raw metals, the state of trade is equally unsatisfactory; tin and copper have especially suffered by the continual crisis. The price of tin, which had suffered a reduction of 11 per cent., has so far improved that the reduction amounts to 7 per cent., while copper suffered a reduction of 11 to 12 per cent. without having experienced any later improvement. Among the wrought metals, pewter has particularly decreased in value, showing a reduction of 15 per cent. To be short, metallurgy is in such a hopeless position that, if circumstances do not change for the better, the most serious anticipations will be fully justified, strengthened as they are by the sensible reduction in the consumption.

#### CUSTOMS.

The reduction in the customs, noticed in the beginning of 1877, has continued in the last year. The amount for 1878, of 15,661,349 is less by 66,875 francs than the amount for 1877. The statement is more favorable in regard to the budget for 1878, showing an increase of 661,349 francs over the anticipated amount of 15 millions. Up to the end of September the income was greater by 194,978 francs than during the same period of the preceding year; at that time a backward movement began, which, continuing up to the end of the year, caused the above mentioned deficiency. The increased importation of wine concerns Hungarian wine especially, and is to be attributed to the reduction in freight as well as to the low price of this article. The importation in the fifth customs district of Switzerland extends particularly to grain, flour, sirup, wine, sheet-iron, machines, furniture, and window-glass; in the sixth district, to cement, hydraulic limes, cotton, iron and steel, cast-iron, flour, rolled-barley, wine, sugar, India-rubber, southern fruits, glass-ware, porcelain, and leather. If the imports have fallen off on the whole, the exports have, on the contrary, been greater than in the previous year. The deficiency in the income, from all imports, amounts to 74,000 francs, of which 68,900 francs is due alone to the reduced import of railway materials.

The increased income from the articles taxed according to weight, amounts to 7,581 francs, and from all exports taken together, but particularly from wood, articles of daily consumption, metals, textile fabrics, and chemical products, to 15,769 francs. The great decrease in the export of live stock concerns sheep principally. The most important reduction is noticeable in wood, bark, tiles. There is a considerable increase in grain, flour, and hardware. The fact is worthy of notice, that 300,000 cwt. more has been conveyed in the direction towards France than has come from that country, and that this difference is caused by wood coming from Austria and Germany. The traffic in grain was particularly noticeable in the direction from east to west and northwest.



## RAILWAYS.

According to a statement published in the Swiss *Handelszeitung*, the income of the Swiss railways for the seven months from January to July was as follows:

Years.	From passengers.	From goods.	Total.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1874.....	11,747,897	18,824,720	25,572,617
1875.....	12,906,073	14,840,331	27,746,404
1876.....	14,085,433	16,249,563	30,334,996
1877.....	13,977,349	15,488,781	29,466,130
1878.....	13,481,930	15,153,055	28,634,983
1879.....	12,995,552	16,112,795	29,108,349

## INCOME PER KILOMETER.

1874.....	7,919	9,818	17,287
1875.....	7,851	9,028	16,879
1876.....	6,983	8,056	15,040
1877.....	5,921	6,561	12,481
1878.....	5,345	9,008	11,858
1879.....	5,087	6,307	11,349

Although 538 kilometers more were under management this year than in the year 1876, the receipts are 1,200,000 francs less. On account of the tariffs having been raised, the decrease of traffic is still more considerable than that of income. The receipts from passenger traffic have in particular fallen off lately, the decrease amounting in July of this, when compared with the same month of last year, to 110,000 francs.

RALPH L. DOERR.

UNITED STATES CONSULATE,  
Basle, October 1, 1879.

## BASLE.

Statement showing the value of declared exports from the consular district of Basle to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Silk ribbons.....	\$223,916 50	\$495,945 60	\$291,948 55	\$501,904 33	\$1,513,714 98
Silk tissues.....	36,183 01	63,123 54	57,540 56	35,588 47	192,435 58
Straw and cotton dress goods..	19,043 76	19,483 76	14,548 21		53,075 73
Watches.....	209,142 38	181,295 81	158,781 54	239,416 47	738,636 20
Cheese.....	65,476 92	48,678 35	86,535 26	67,595 02	268,284 15
Miscellaneous goods.....	33,279 75	29,251 92	24,943 90	36,137 23	123,612 80
Total.....	587,042 32	837,777 58	634,298 02	880,641 52	2,939,750 44

RALPH L. DOERR.

UNITED STATES CONSULATE,  
Basle, October 1, 1879.

## GENEVA.

*Report, by Consul Adams, on the trade and industry of the consular district of Geneva for 1879.*

The consular district of Geneva includes the cantons of Geneva, Vaud, Fribourg, and the Valais, that is, the southwest corner of Switzerland lying between the Jura and the central range of the Alps, and drained by the northern affluents of the Upper Rhone and Lake Geneva. According to the Statistical Handbook of Switzerland for 1879, the population of this region for 1880 is estimated at 573,096 souls. According to a census taken in 1876, there were 119,744 households, of which 50,546 were engaged in agriculture, possessing 509,415 head of stock of all kinds, which indicates the agricultural and pastoral character of the people. The area of these four cantons is 10,418 square kilometers, of which 3,577 square kilometers (including the surface occupied by towns, roadways, lakes, &c.) are unproductive, and 6,841 square kilometers (divided into woodland, vineyards, and farmlands) are productive.

The forests lie principally on the slopes of the Jura and the Lower Alps and yield, under supervision of the federal government, a constant supply of timber, lumber, firewood, and charcoal. As the home demand for fuel is greater than the supply, prices are always high, and there is a large importation of coal from France and Belgium.

The farm lands include all areas under cultivation, except the vineyards. The harvests this year of wheat, barley, oats (the principal grains grown here), and hay are far above the average yield in quantity and quality, but not equal to the home demand. The canton of Geneva alone takes of cereals 200,000 *quintaux metriques*\*, with an estimated yield of only 60,000 *quintaux*. There is an exportation of some importance of horses, cattle, butter, cheese, condensed milk, hay, straw, and hides. At a great cattle fair held in October at Bulle, canton of Fribourg, the average price for bullocks was from 450 to 500 francs, the finer specimens bringing from 800 to 1,500 francs. The several varieties of the Gruyère cheese are known everywhere, and an unusual demand is reported this year from Germany, France, and Italy. Fruits are a failure.

The vineyards occupy a narrow belt running down the valley of the Upper Rhone from Sierre, and along the northern and southwestern shores of Lake Geneva to the frontier of Savoy, containing, in all, an area of 85 square kilometers. The wines produced are principally white, of which the best known are the Muscat and Yvorne of the Rhone Valley, the Villeneuve and La Côte of the lake shore. Of these there is usually a small exportation to England and France. This year the yield is said to be the worst in quantity and quality since 1816. The season began a month later than usual, and snow fell in the canton of Vaud on the 16th of October. In the canton of Geneva the crop is almost a failure. In Vaud the yield is estimated at 5,000,000 francs, against an average of 15,000,000 francs. In the Rhone Valley, which, running east and west, receives the sun all day, and has a climate of its own, results are better but still bad. The calamity falls most heavily on small proprietors, whose vines are their only resource. The larger owners and dealers have the benefit of the immediate rise in values of previous vint-

\* 1 *quintal metrique* = 100 kilograms. The annual importation of cereals into all Switzerland is estimated at 4,000,000 quintals, principally from the Black Sea, Africa, Hungary, and America. This year the importation is estimated at 3,500,000 quintals.

ages which always follows a bad grape harvest. Before the vintage was finished prices had already risen higher than in any year since 1873.

#### MANUFACTURES.

With an inexhaustible and constant supply of water-power, this part of Switzerland is nearly destitute of machinery and manufactures; a fact due partly to the distance of sources of supply and of good markets and the cost of transportation, but largely also to the habits and temper of the people. The characteristic industry of the Swiss who are not farmers, shepherds, vine-growers, shopkeepers, or hotel-keepers, is what is called here *la petite industrie*—the fabrication of small articles of common use, convenience, or pleasure, in general demand, and requiring little, or very light and simple, machinery. Such are the *fabriques* of chocolate, cigars, straw hats (a new industry here), musical boxes, gold chains and jewelry, and, the most famous product of the country, watches. In this consular district there are 19 cigar factories, employing 1,400 workmen, with a large sale in Switzerland and a considerable exportation to France and Italy, where the peculiar *cigares de Vevey* are well known; in the city of Geneva, 8 manufactories of musical boxes, employing 200 or 300 workmen, with annual sales to the value of 700,000 francs; 80 or 90 houses engaged in the manufacture of watches, or parts of watches, representing a capital of 25,000,000 francs, with annual sales to about the same amount. Production of this kind is the first to feel the approach of commercial depression, and the manufacturing interests of Southwestern Switzerland are just emerging from the severest trial they have ever known. One of the largest manufacturers of watches here tells me that within six months there is a slight but manifest improvement in the demand from all quarters. It is, however, to the United States that all look for relief. The returning prosperity there is welcomed as meaning better times for Switzerland.

#### TRADE WITH THE UNITED STATES.

*Exports.*—According to the records of the office, the exportations to the United States from this district rose steadily till it reached the value of 4,712,996 francs in 1871, and then fell rapidly to 1,248,255 francs in 1878. The turning point seems to have been reached in the second quarter of the present year, the third quarter showing a decided increase.

#### Statistics of population for the consular district of Geneva.

Cantons.	Population.			Religion.		Number of households in 1876.	
	Census of 1870.	Increase, 1860-1870.	Estimated, 1880.	Catholic.	Protestant.	Engaged in agriculture.	Whole number.
		<i>Per cent.</i>		<i>Per cent.</i>	<i>Per cent.</i>		
Geneva.....	93,289	13.260	103,726	51.4	48.8	2,579	22,677
Vaud.....	231,700	9.021	250,119	8.0	92.0	21,344	52,953
Valais.....	96,884	7.110	108,096	99.0	1.0	16,062	20,726
Fribourg.....	110,832	5.294	116,185	85.0	15.0	10,621	23,888
Total.....	532,655	.....	573,096	.....	.....	50,546	119,744

*Census of stock, 1876, consular district of Geneva.*

Cantons.	Horses.	Mules.	Asses.	Horned cattle.	Swine.	Sheep.	Goats.	Total.
Geneva .....	2, 978	15	219	6, 949	2, 345	871	1, 356	14, 728
Vaud .....	16, 801	108	178	77, 243	41, 879	42, 386	16, 460	186, 055
Valais .....	1, 912	2, 409	729	65, 024	12, 224	57, 614	28, 728	168, 640
Fribourg .....	8, 761	73	79	64, 515	24, 278	20, 966	12, 320	130, 992
Total .....	30, 447	2, 605	1, 205	213, 731	80, 726	121, 837	58, 864	509, 415

*Areas in square kilometers.*

Cantons.	Productive lands.				Unproductive lands.	Total.
	Woodland.	Vineyards.	Farm lands, &c.	Total.		
Geneva .....	21. 0	14. 8	197. 1	232. 9	46. 5	279. 4
Vaud .....	684. 0	55. 8	1, 989. 0	2, 728. 8	494. 0	3, 222. 8
Valais .....	625. 3	11. 4	1, 773. 2	2, 409. 9	2, 887. 2	5, 247. 1
Fribourg .....	276. 9	2. 8	1, 189. 9	1, 469. 6	199. 4	1, 669. 0
Total .....	1, 607. 2	84. 8	5, 149. 2	6, 841. 2	3, 577. 1	10, 418. 3

*Declared exports to the United States for the consular district of Geneva for year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Watches .....	\$27, 996 88	\$24, 781 12	\$15, 807 66	\$35, 383 63	\$103, 919 29
Musical boxes .....	5, 363 62	6, 378 67	5, 271 51	8, 850 83	25, 864 63
Patent leather .....	36, 428 89	30, 362 74	83, 800 82	57, 696 11	158, 297 06
Miscellaneous .....	12, 082 10	5, 417 50	11, 896 00	8, 221 13	37, 567 42
Total .....	81, 821 49	66, 890 12	66, 785 09	110, 151 70	325, 648 40

## ST. GALL.

*Statement of the exports from St. Gall to the United States during the year ending September 30, 1878.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Embroidered goods:					
Hamburg trimmings—					
In cotton foundation, white .....	\$608, 722 58	\$611, 547 36	\$683, 725 63	\$576, 321 86	\$3, 120, 317 41
In cotton foundation, colored .....	9, 864 45	21, 320 58	2, 974 74	340 14	34, 499 91
In other foundations .....	284 50	3, 043 99	25 09	109 89	3, 443 56
Tamboured articles—					
Lace curtains, vestibules .....	11, 361 13	41, 165 78	13, 024 98	50, 650 25	116, 211 14
Handkerchiefs, and other fancy articles .....	2, 682 15	5, 061 73	3, 132 28	5, 256 40	16, 102 65
Cotton goods:					
Loom trimmings—					
In cotton .....	18, 000 89	32, 442 05	6, 764 51	1, 822 62	54, 729 07
In half-linen and dress-goods .....	5, 450 40	11, 129 94	797 01	1, 113 28	18, 550 63

*Statement of the exports from St. Gall to the United States, &c.—Continued.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Cotton goods—Continued.					
Fancy articles—					
Colored Toggenburg articles . . . .	\$7, 161 28	\$5, 015 74	\$7, 601 15	\$11, 199 46	\$30, 977 63
Printed handkerchiefs, &c., white foundation . . . . .	1, 058 90	1, 383 88	.....	639 88	3, 082 16
Piece-goods—					
Plain muslin . . . . .	2, 112 40	154 40	748 51	2, 242 07	5, 257 88
Figured and dotted Swiss, &c. . .	26, 135 80	34, 044 87	13, 279 92	12, 634 89	86, 695 48
Silk-goods:					
Piece-goods . . . . .	26, 175 07	28, 423 52	28, 834 51	39, 044 51	122, 477 61
Ribbons . . . . .	.....	5, 221 48	1, 121 91	541 18	6, 884 57
Embroidered articles . . . . .	1, 183 34	3, 775 15	187 27	12, 438 26	17, 584 02
Miscellaneous:					
Iron-yarn goods . . . . .	4, 043 63	2, 886 74	4, 184 30	5, 972 17	17, 086 84
Provisions . . . . .	2, 395 52	808 19	1, 161 87	689 59	4, 856 17
Sundries . . . . .	555 21	864 73	400 67	5, 881 90	7, 702 51
Total in United States gold coin.	1, 112, 825 32	1, 108, 719 63	717, 964 35	726, 907 44	3, 666, 416 74
Total for the preceding year . . .	900, 660 51	1, 023, 760 82	650, 671 20	848, 730 79	3, 423, 823 32
Increase . . . . .	212, 164 81	84, 958 81	67, 298 15	.....	242, 593 42
Decrease . . . . .	.....	.....	.....	121, 823 35	.....

A. J. DEZEYK.

## ZURICH.

*Report, by Consul Byers, on the vintage and food prices of the district of Zurich for 1879.\**

I have delayed this report somewhat to obtain the result of the vintage finished this week. The failure of the vines has been, in most districts, lamentable.

Wine is not a luxury but a necessity with the Swiss people, fully as much so as bread or meat; hence, the sad failure is all the more noticeable.

In a few vineyards there are tolerable results; in many only half the usual vintage, and in many more only a third and even less. Usually grape growing and small special farming is very profitable in the country; 10, 20, and even 30 per cent. on the investment is not uncommon; but this exceptional year there is, in most places, no profit at all.

There are 100,000 acres of vines in the country, valued at about 50,000,000 francs. The yield averages, perhaps, 40,000,000 francs worth of wine per year, consumed wholly by a population of only about 2,500,000. As the produce of these vineyards is a necessary article of food here, the failure per year will necessitate the expenditure of 15,000,000 to 20,000,000 francs on foreign wines. These imported wines will be furnished by Spain, Hungary, and France.

The almost complete failure of the vines in most districts was unexpected, even a few weeks ago, when growers had a right to expect at least a fortnight still of ripening weather.

What with the failure in crops, the unprofitable position of the silk, watch, and cotton industries, together with the almost bankrupt con-

\*A portion of this report relating to the Swiss and American competitive silk and watch industries will be found embodied in the Secretary's letter, p. 153, vol. 1.

dition of the railroads, the position of Switzerland at the commencement of this winter is anything but gratifying.

There is a hope that the new revival of business in America may extend some of its good influences even to the Alps. Time only will tell.

Below I give a list of present prices of some of the necessary articles of life at Zurich:

White bread .....	per pound..	\$0 05 to	\$0 06
Butter.....	do .....		35
Beef.....	do .....	17 to	20
Pork.....	do .....		18
Coffee.....	do .....		40
Sugar.....	do .....		12
Eggs.....	per dozen..		25
Wood, cut and split .....	per cord..		12 00
Coal.....	per cwt..	45 to	50
Rent, for a floor of five or six rooms.....	per year..		500 00

S. H. M. BYERS.

UNITED STATES CONSULATE,  
Zurich, October 30, 1879.

## SPAIN.

### ALICANTE.

*Statement showing the value of declared exports from the consular district of Alicante to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Mats .....			\$1,500 00	\$990 00	\$2,490 00
Wine.....			9,245 00	2,598 00	11,843 00
Licorice root .....			4,563 77	49,069 14	53,632 91
Almonds .....				650 00	650 00
Total, United States gold.....			15,308 77	53,307 14	68,615 91
Total for preceding year.....		\$21,736 12	24,099 20	16,752 54	72,587 86
Increase.....				38,554 60	
Decrease .....		21,736 12	18,790 43		3,971 95

WILLIAM LEACH GIBO.

### BARCELONA.

*Report, by Consul Scheuch, on the trade and commerce of Barcelona for the year 1878 and the first six months of 1879.*

I beg leave to lay before you the accompanying returns of American and foreign shipping at this port during the year 1878 and for the first six months of 1879.

I must again call attention to the fact that statistical information is not officially published or printed on shipping and commerce, yet the inclosed tabular forms may be counted as accurate, especially those on American and foreign shipping.

It is not satisfactory to point to the fact, as shown in returns A and B, of the steady falling off of arrivals of American vessels. The only

reason for this, I believe, is the heavy port charges of Spain and the continual fines imposed for trivial causes, often attributable to Spanish consuls in the United States, who levy heavy charges for the certification of the captain's manifest and other consular attention, so that the captains believe themselves perfectly safe against fine.

It would be a plain repetition of previous reports to describe in detail the cargoes brought to this country by foreign vessels, mostly all bringing their own countries' productions, viz, the Italian, charcoal, marble, sulphur, staves; the Russian, timber, deals, and tallow; the Danish, codfish; the Greek, grain and maize; the Austrian, timber, masts, and staves; the Norwegian, timber, deals, and codfish; the German, codfish, hardware, and fancy goods, with occasional cargoes of cotton and petroleum from the United States; the English, principally coal, railroad iron, hardware, fire-bricks, and, during the last 18 months, grain, petroleum, and cotton from the United States.

The year 1878 was not favorable for the Spanish shipping, as the imports and exports did not reach the value of the previous year. The commercial transactions of the past year have been very difficult and limited, hence the stagnation in shipping.

#### IMPORTATIONS OF SOME SPECIAL ARTICLES.

*Cotton* received in 1878, 156,000 bales; on hand January 1, 1878, 23,000 bales; consumption, 155,000 bales; on hand January, 1879, 26,000 bales.

The cotton received came as follows: From the United States, 97,000 bales; from Brazil, 15,000 bales; from other South American countries, 5,000 bales, and the remainder from the Levante and India.

*Sugar*.—Boxes received during 1878, 44,574; consumed during 1878, 44,000 boxes; stock on hand January 1, 1879, 14,275 boxes; 29,000 boxes came from Spanish colonies (Cuba and Philippine Isles), 10,000 boxes from Andalusia, and the remainder from foreign countries.

*Hides*.—On hand January 1, 1878, 99,000; received during the year, 368,510 pieces; consumption in 1878, 393,500 pieces, leaving a small stock of about 70,000 pieces on hand January, 1879. The consumption was about the same as the previous year, but prices much higher.

*Coffee*.—Total receipts in 1878, 22,565 bags, all taken up and disposed of at higher prices than the previous year, leaving no stock on hand January 1, 1879.

*Cocoa*.—Total receipts, 13,650 bags, somewhat less than in 1877. Prices very high.

*Petroleum*.—Receipts, 19,750 barrels and 10,870 boxes, against 35,000 barrels and 26,500 boxes during 1877, showing, therefore, a serious diminution. Price moderate.

*Red wines*.—The common Catalonia wines were formerly all shipped to the United States, Cuba, and South America, but of late, as already mentioned in my last year's report, they are largely exported to France, where it seems they are in great demand to adulterate and imitate Bordeaux wines, so that prices here have risen accordingly, the crops not being over abundant but very superior in quality.

*Agriculture*.—The great scarcity of rain during the entire year of 1878 told hard on the farmers in this district, they hardly raising enough of food for themselves and their cattle, and most of the woolen and cotton factories in the interior, run by water-power, had to suspend work entirely.

*Railways*.—Matters have been more satisfactory. The lines between Barcelona, Tarragona, and France, and the one from Barcelona to Vich

have both worked without interruption, and thus have gathered good receipts.

No public works of any special note have been undertaken during 1878, and the works commenced in 1877 (quays, waterworks, and warehouses) have advanced but slightly.

#### THE HARBOR.

The people of Barcelona have given evidence of public spirit in the furtherance of the works for the improvement of the harbor. The eastern mole has been prolonged about one-third and brought so near the end of the western mole as to render the enlarged area thoroughly secure under any wind. The depth of water inside the moles is from 8 to 10 meters in the innermost harbor, and 12 to 14 near the mole's end. Many of the projected works (see plan of "port of Barcelona," when finished, forwarded with last year's commercial report, October, 1878), some of them declared urgent, are in progress; among them wet-docks for merchant vessels, accommodation for the officials and authorities of the port, and a long range of warehouses. These, added to the docks already in existence, will place Barcelona, in point of convenience for merchant shipping, in the same conditions enjoyed by the commercial marine in Marseilles or Liverpool.

FRED'K H. SCHEUCH.

UNITED STATES CONSULATE,  
*Barcelona, November 1, 1879.*

#### *Return of American shipping at the port of Barcelona during the year 1878.*

Arrivals and departures.	No.	Crew.	Tonnage.
Arrived .....	2	17	755
Departed .....	2	17	755

Cargoes inward: 1,312 bales of cotton, of the value of \$91,840.  
Cargoes outward, in ballast.

#### *American vessels arrived at the port of Barcelona during the years 1874-1878, inclusive.*

Years.	No.	Crew.	Tonnage.
1874 .....	15	153	7,499
1875 .....	10	94	5,015
1876 .....	12	112	5,592
1877 .....	10	88	3,601
1878 .....	2	17	755

#### *Return of Spanish shipping exclusively at the port of Barcelona during the year 1878.*

Description.	Arrived.			Departed.		
	Vessels.	Tonnage.	Value.	Vessels.	Tonnage.	Value.
Coasting* .....	1,044	213,698	\$9,149,000	648	178,485	\$12,490,000
Foreign .....	746	235,083	15,423,000	795	153,375	4,570,000
Colonial .....	63	24,870	1,365,000	152	58,550	4,191,000
Total .....	1,853	473,651	25,937,000	1,595	390,410	21,251,000

\* Coasting vessels under 20 tons are not figured in the foregoing statement. Of this class some 2,215 entered the port during the year, values of cargoes unknown.



*Return of foreign shipping (American and Spanish not included) at the port of Barcelona during the year 1878.*

Flag.	Arrived.			Departed.		
	Number.	Tonnage.	Value.	Number.	Tonnage.	Value.
British .....	273	172,365	\$4,900,000	273	172,365	\$45,000
Italian .....	182	44,655	1,247,950	182	44,655	115,000
French .....	112	65,755	3,664,200	112	65,755	600,000
Swedish and Norwegian .....	118	41,130	1,613,250	118	41,130	70,000
German .....	60	30,875	1,228,800	60	30,875	32,500
Russian .....	15	8,050	208,500	15	8,050	.....
Belgian .....	9	11,820	480,000	9	11,820	.....
Danish .....	21	3,065	39,550	21	3,065	.....
Greek .....	5	1,945	67,000	5	1,945	.....
Austrian .....	8	2,385	74,980	8	2,385	28,000
Dutch .....	8	1,785	75,250	8	1,785	30,000
Portuguese .....	8	525	5,500	8	525	14,250
Total .....	814	384,355	13,662,980	814	384,355	994,750
Total for previous year .....	839	377,019	10,447,105	839	377,019	693,500

*Statement showing the value of declared exports from Barcelona to the United States for the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Wine .....	\$2,221 61	\$685 24	\$2,715 83	\$1,046 04	\$6,668 12
Licorice root .....	3,225 76	17,149 93	.....	14,632 26	35,007 95
Corks .....	3,153 80	268 87	1,166 21	550 14	5,148 02
Cigarette paper .....	360 70	527 20	108 00	.....	995 90
Cream of tartar .....	539 60	.....	.....	.....	539 60
Soap .....	.....	.....	100 05	.....	100 05
Sundries .....	84 70	116 62	.....	209 50	410 82
Total .....	9,585 57	19,047 96	4,090 09	16,446 94	49,170 46
Total for preceding year .....	11,404 13	11,961 97	14,898 53	28,517 89	66,772 52
Increase .....	.....	7,085 89	.....	.....	.....
Decrease .....	1,818 56	.....	10,808 44	12,070 95	.....

*Statement showing the coal imported at Barcelona during the year ending September 30, 1879.*

Months.	From Cardiff.	From Newport.	From Swansea.	From Grimsby.	From Newcastle.	From Leith.	From Marseilles.	From Gligon.	Total.
October, 1878 .....	Tons. 5,804	Tons. 2,391	Tons. 1,442	Tons. .....	Tons. 5,774	Tons. .....	Tons. 458	Tons. 15,869	.....
November, 1878 .....	5,980	5,511	.....	2,229	3,441	534	130	18,795	.....
December, 1878 .....	15,118	2,159	885	.....	4,737	980	.....	23,829	.....
January, 1879 .....	10,351	7,751	.....	.....	5,506	.....	412	24,820	.....
February, 1879 .....	6,297	4,894	3,375	1,820	2,212	1,370	200	20,168	.....
March, 1879 .....	11,408	3,006	2,174	.....	2,688	1,559	425	20,828	.....
April, 1879 .....	9,125	1,726	2,140	834	4,990	800	.....	19,500	.....
May, 1879 .....	12,632	2,448	.....	2,053	3,080	606	400	26,108	.....
June, 1879 .....	11,021	900	890	.....	3,183	1,050	511	17,525	.....
July, 1879 .....	11,494	2,592	.....	974	4,825	595	200	26,639	.....
August, 1879 .....	15,367	3,644	1,748	2,070	1,105	1,482	.....	26,936	.....
September, 1879 .....	10,961	2,997	1,422	.....	4,634	2,654	.....	23,668	.....
Total .....	127,013	40,019	14,046	10,080	51,123	11,070	300	2,736	254,337

## CADIZ.

Statement showing the imports at Cadiz for the year ending September 30, 1879.

Articles.	Quantity.	Value entered.	Whence imported.
Coal.....kilograms..	49,743,806	\$348,206 80	England.
Spirits.....butts..	3,835	460,200 00	England, France, Germany, United States, Cuba.
Cheese.....cases..	1,838	91,900 00	England, France, Germany, Canary Isles.
Empty casks.....	3,884	15,576 00	England.
Sugar.....boxes..	17,489	524,670 00	England, Germany, Cuba, Manila.
Do.....sarcos..	40,002	100,008 00	Do.
Starch.....boxes..	923	9,280 00	Do.
Iron.....bundles..	23,100	55,250 00	England, France.
Do.....bars..	1,428	4,268 00	Do.
Do.....tubes..	10,006	40,024 00	Do.
Do.....rails..	11,001	55,005 00	Do.
Do.....sheet..	1,556	3,112 00	Do.
Railway sleepers.....	106,618	106,618 00	Do.
Soap.....boxes..	4,510	90,200 00	England.
Herrings.....barrels..	405	2,430 00	Do.
Butter.....do....	1,172	35,180 00	England, France, Germany.
Lard.....do....	2,977	80,810 00	England, France, Germany, United States.
Bacon.....boxes..	1,156	23,120 00	England, Germany, United States.
Malze.....sacks..	11,539	51,965 00	England, France, Italy, Morocco.
Dates.....boxes..	591	8,865 00	England.
Tea.....do....	404	12,120 00	England, Germany, Manila.
Preserves.....do....	1,498	14,880 00	England, France, Italy.
Cement.....barrels..	788	3,940 00	England, France.
Beer.....do....	1,562	81,240 00	England, France, Germany.
Pitch and tar.....do....	1,216	8,512 00	England, Sweden and Norway, Germany, United States.
Potatoes.....sacks..	5,851	17,558 00	England, France.
Leaches.....cases..	827	9,810 00	England.
Bricks.....do....	82,117	287 00	Do.
Wheat.....sacks..	2,468	11,106 00	England, Canary Isles, United States, France.
Flour.....do....	3,002	60,040 00	England, France.
Beans.....do....	680	2,640 00	Do.
Staves.....do....	1,456,000	184,912 00	United States, England.
Petroleum.....cases..	64,762	129,524 00	United States.
Coffee.....sacks..	16,567	496,710 00	England, Canary Isles, Cuba, Mexico, Manila, France.
Cinnamon.....bales..	80	3,000 00	England.
Pepper.....sacks..	205	6,150 00	Do.
Codfish.....kilograms..	99,400	8,978 00	Do.
Cochineal.....sacks..	530	79,500 00	Canary Isles.
Chick-pease.....do....	300	2,700 00	Do.
Slabs.....do....	12,271	4,908 00	Italy.
Ice.....kilograms..	675,000	67,500 00	Sweden and Norway.
Tobacco.....boxes..	677	Unknown...	Cuba, Manila, United States.
Do.....tierces..	32,835	do.....	Do.
Do.....bales..	6,776	do.....	Do.
Hides.....do....	32,950	32,950 00	River Platte, Canary Isles, Cuba.
Cocoa.....sacks..	184	6,700 00	Cuba.
Cocoa-nuts.....do....	70,085	7,003 00	Do.
Wood.....boards..	104,053	104,053 00	Russia, Sweden and Norway, United States.
Do.....deals..	76,831	38,165 00	Do.
Do.....beams..	5,592	83,880 00	Do.
Do.....spars..	392	2,352 00	Do.
Do.....pieces..	5,000	336,000 00	Russia, Sweden and Norway, United States, Cuba.
Rice.....sacks..	690	2,760 00	Germany, France.
Chicory.....barrels..	568	11,360 00	France.
Sulphur.....sacks..	1,250	3,750 00	Do.
Cattle.....head..	3,084	121,360 00	Morocco.
Total.....		4,068,015 80	

Statement showing the exports from Cadiz for the year ending September 30, 1879.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Wines.....butts..	50, 023	\$7, 503, 450	England, France, Sweden and Norway, Russia, Denmark, Belgium, United States, River Platte, Brazil, &c.
Salt.....lasts..	77, 917	350, 638	Do.
Lead.....pigs..	90, 716	453, 580	England.
Olive oil.....jars..	102, 905	205, 810	Cuba, Canary Isles, Manila, Mexico.
Do.....cans..	1, 996	29, 940	Do.
Olives.....barrels..	83, 806	1, 175, 200	Cuba, Canary Isles, Manila, Mexico, France, England, Germany, River Platte, Brazil.
Vermicelli.....boxes..	91, 961	183, 922	Cuba, Canary Isles, Manila, Mexico.
Raisins.....do....	40, 792	81, 584	Cuba, Canary Isles, Manila, Mexico, France, England, Germany, River Platte, Brazil.
Figs.....do.....	35, 578	35, 578	Do.
Dates.....do.....	310	4, 650	Cuba, Canary Isles, Manila.
Chick-pease.....sacks..	11, 771	106, 939	Cuba, Canary Isles, Manila, River Platte, England.
Canary seed.....do....	5, 402	27, 010	Cuba, Canary Isles, France, River Platte, England.
Wheat.....do.....	5, 200	23, 850	Cuba, England.
Flour.....do.....	3, 094	61, 880	Cuba, Canary Isles, France.
Almonds.....do.....	595	2, 975	Cuba, Canary Isles, River Platte, Manila.
Cumin.....do.....	257	3, 855	Cuba, Canary Isles, Manila.
Soap.....boxes..	1, 385	27, 700	Cuba, Canary Isles, River Platte, Manila.
Pork.....barrels..	1, 311	41, 952	Cuba, Canary Isles, River Platte, Manila, England.
Salted tunny fish...do....	3, 968	31, 744	Cuba, France, England.
Preserves.....boxes..	2, 119	21, 190	Cuba, Manila, Canary Isles, England.
Corks.....sacks..	2, 924	35, 088	Cuba, France, Mexico, Germany, England.
Corkwood.....bales..	1, 493	7, 465	Cuba, France, Mexico, Germany, England, United States.
Rice.....sacks..	1, 032	9, 288	Cuba, Canary Isles, Manila.
Beans.....do.....	1, 554	6, 216	Do.
Leaches.....boxes..	408	11, 016	Cuba, Canary Isles.
Laurel leaf.....bales..	293	1, 858	Cuba, Canary Isles, Manila.
Red pepper.....sacks..	788	2, 952	Cuba, Canary Isles, Manila, England.
Saffron.....boxes..	32	17, 600	Cuba, Canary Isles, Mexico.
Garlic.....strings..	50, 290	15, 087	Cuba, Canary Isles.
Onions.....do.....	10, 614	4, 245	Cuba, Canary Isles, Manila.
Finng earth.....sacks..	1, 568	6, 252	England, France, Germany, United States.
Dregs of wine.....do....	875	1, 750	England, France.
Tobacco.....tierces..	2, 015	.....	Do.
Oranges.....boxes..	20, 693	62, 079	Do.
Butter.....barrels..	622	18, 660	Cuba, Canary Isles.
Licorice.....boxes..	491	2, 455	Cuba, England, France, United States.
Rags.....bales..	350	2, 300	Germany, England.
Bones.....kilograms..	271, 500	543	England.
Coffee.....sacks..	1, 069	32, 070	France, England.
Chocolate.....boxes..	340	2, 720	Cuba, Canary Isles.
Total .....	.....	10, 613, 579	

Statement showing the navigation at the port of Cadix, Spain, for the year ending September 30, 1879.

Flag.	From or to—	ENTERED.				CLEARED.			
		Steamers.		Sailing vessels.		Steamers.		Sailing vessels.	
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
American	United States	102	71,047	160	24,460	262	96,507	18	53,271
	Spain	9	5,428	38	6,002	47	12,028	18	11,566
	England			2	968				
	France			2	1,178				
	Italy			2	1,732				
British	United States			2	1,373				
	Spain								
	England								
	France								
	Italy								
Danish	United States								
	River Plate								
	Spain								
	France								
	Italy								
Dutch	United States								
	River Plate								
	Spain								
	France								
	Italy								
Austrian	United States								
	River Plate								
	Spain								
	France								
	Italy								
French	United States								
	River Plate								
	Spain								
	France								
	Italy								
Belgian	United States								
	River Plate								
	Spain								
	France								
	Italy								
German	United States								
	River Plate								
	Spain								
	France								
	Italy								
Italian	United States								
	River Plate								
	Spain								
	France								
	Italy								
Portuguese	United States								
	River Plate								
	Spain								
	France								
	Italy								

Flag.	From or to—	ENTERED.				CLEARED.									
		Steamers.		Sailing vessels.		Total.		Steamers.		Sailing vessels.		Total.			
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.		
Russian .....	Russia .....			9	3,164		3,164					8	2,578	8	2,578
United States .....	United States .....											1	609	1	609
River Platte .....	River Platte .....											1	364	1	364
Spain .....	Spain .....	4	1,268	15	3,785	19	5,043								
England and Colonies .....	England and Colonies .....	4	1,467	8	1,636	12	3,103								
Sweden and Norway .....	Sweden and Norway .....			30	7,042	80	7,942	7	2,500	38	9,757	45	12,257	45	12,257
United States .....	United States .....			2	886	2	886					5	1,235	5	1,235
Brazil .....	Brazil .....											6	1,244	6	1,244
River Platte .....	River Platte .....											5	1,321	5	1,321
Cuba .....	Cuba .....	27	66,400	19	3,401	46	69,801	30	73,700	20	4,042	50	77,742	50	77,742
Manila .....	Manila .....	10	28,000	1	700	11	28,700	10	28,000	10	28,000	20	56,000	20	56,000
Canary Isles .....	Canary Isles .....	23	8,863	3	539	26	9,402	24	8,635	3	400	27	9,044	27	9,044
Germany .....	Germany .....	16	8,798			16	8,798	16	8,798			16	8,798	16	8,798
France .....	France .....	138	67,890			138	67,890	138	67,890			138	67,890	138	67,890
England .....	England .....	180	74,822			180	74,822	180	74,822	5	1,316	185	76,138	185	76,138
River Platte .....	River Platte .....			1	220	1	220			2	743	3	743	3	743
United States .....	United States .....			1	827	1	827					3	892	3	892
Brazil .....	Brazil .....														
Total .....	Total .....	609	407,783	618	156,595	1,227	564,378	611	408,078	643	150,509	1,254	558,587	1,254	558,587

*Statement showing the value of declared exports from the consular district of Cadiz to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Wines.....	\$73,455 71	\$103,507 03	\$147,322 74	\$96,062 30	\$419,347 78
Salt.....	1,505 56	9,407 82	23,545 11	10,061 70	45,120 19
Sundries.....	242 50		501 00	1,737 69	2,581 09
Total for the preceding year.....	74,303 77	112,914 85	171,368 85	108,461 59	467,049 06
Increase.....	82,434 59	97,648 11	101,985 20	106,426 18	388,498 08
Decrease.....	8,130 82	15,266 74	69,388 65	2,036 41	78,556 96

UNITED STATES CONSULATE,  
Cadiz, September 30, 1879.

A. N. DUFFIE.

### GRAO DE VALENCIA.

*Statement showing the value of declared exports from the consular district of Valencia, Spain, to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Oranges.....	\$84,584 98	\$231,451 79	\$50,715 13		\$415,751 90
Ground-nuts.....	260 00	1,381 13			1,621 13
Raisins.....	1,313 48	945 00	396 03		2,654 51
Lemons.....		21 39			21 39
Melons.....	67 50				97 50
Earth nuts.....		270 23			270 23
Dried fruit.....		1,633 32			1,633 32
Onions.....	60 00	100 00			160 00
Saffron.....	1,843 86	5,674 30	1,130 56		8,647 72
Preserved capers.....			75 00		75 00
Tiles, mosaic.....	8,039 95	1,012 56	679 98	\$104 73	4,837 17
Glazed tiles.....	449 15				449 15
Palm-leaf hats.....		1,722 50	390 00		2,112 50
Oil paintings.....	68 00				68 00
Sandals.....		127 38			127 38
Jute.....		40 00			40 00
Silver purses.....			380 50		380 50
Fishing-tackle.....				1,942 50	1,942 50
Miscellaneous.....	841 72	321 99	2,159 22	88 27	3,406 20
Total in United States gold.....	92,517 64	244,681 59	104,926 37	1,630 60	443,656 10
Total preceding year.....	97,367 98	160,565 39	237,746 16	1,278 85	496,977 88
Increase.....		84,096 20		252 15	
Decrease.....	4,850 34		132,819 79		53,521 78

UNITED STATES CONSULATE,  
Barcelona, November 1, 1879.

FRED. H. SCHREUCH.

### MALAGA AND ALL SPAIN.

*Report, by Consul Quarles, on the trade and industries of the province and port of Malaga, and on the imports and exports of all Spain, together with remarks on the best means of developing trade with the United States.*

#### COMMERCIAL DEPRESSION.

In transmitting reports of the commerce of Malaga for the year just closed, I regret I am unable to state that the gloom and depression which pervaded business circles at the close of the preceding year have, to any considerable degree, been dispelled.

To the effects of the commercial depression pervading all the countries of Europe was added the partial failure of the olive-oil crop, rendering it impossible for dealers in this commodity to compete with Italian shippers. The result has been a large falling off in the shipment of this article during the past year. This fact, together with the exceedingly low price of raisins during the spring, almost caused a cessation of business for the first nine months of the year. During the last three months, however, the high price of raisins in the United States, and the consequent active demand, somewhat relieved the stagnant state of trade here, but this relief here has not been very far-reaching or of long duration.

The close of the vintage and the consequent falling off in the demand for raisins, revealed almost the same stagnation in business circles that preceded it, thus showing that there has been little or no improvement in the other departments of trade.

I subjoin tables of the principal exports and imports for the year just closed, showing the relative increase or decrease, as compared with the preceding year.

*Principal exports.*

Articles.	Quantity.	Increase over 1878.	Decrease from 1878.
Raisins.....	boxes 1,987,410	.....	26,158
Do.....	barrels 218	.....	.....
Do.....	frails 21,616	.....	8,390
Almonds.....	fanegas 5,692	.....	2,691
Do.....	boxes 26,428	3,329	.....
Lemons.....	cheets 40,963	9,083	.....
Oranges.....	do 81,235	12,985	.....
Grapes.....	barrels 32,980	7,908	.....
Orange and lemon peel.....	bales 6,875	1,017	.....
Dried figs.....	frails 77,685	18,818	.....
Beans.....	fanegas 20,250	.....	7,481
Soap.....	cases 883	.....	1,387
Lead.....	bars 357,751	.....	123,270
Wine.....	arrobas 408,757	87,497	.....
Do.....	cases 1,297	.....	134
Olive oil.....	arrobas 409,779	.....	465,715
Grass.....	bales 72,917	3,860	.....

The decrease in the amount of raisins shipped as compared with the preceding year may be accounted for by the shortness of the crop. Notwithstanding the abundance of rain with which we were favored during the spring, the raisin crop fell some 300,000 boxes short of the one of 1878.

The above table shows a considerable increase in the exports of green fruit, which increase was only made possible by the active demand in the United States for all kinds of fruit which prevailed towards the close of the year. In almost every other instance the table of exports shows a decrease as compared with the preceding year.

*Principal imports.*

Articles.	Quantity.	Increase over 1878.	Decrease over 1878.
Coals.....	tons 858,762	22,319	.....
Staves.....	pieces 419,769	103,228	.....
Timber.....	boards 318,119	137,974	.....
Cotton.....	bales 8,536	940	.....
Codfish.....	tons 77,078	20,627	.....
Sugar.....	cases 4,508	878	.....
Petroleum.....	do 49,596	5,061	.....
Do.....	barrels 290	.....	1,407
Grass (Esparto).....	tons 12,445	.....	.....

It will be seen from the above tables that while there has been considerable decrease in nearly all articles of exports except green fruit, there has been a steady increase over last year in the imports. The great increase is to be found in the importation of timber. The cause of this increase is the rapidly increasing population of Malaga, demanding the construction of new buildings and a larger supply of furniture and other wood articles. I regret very much that no increase in the importation from America can be reported.\* It has now been more than three years since a cargo of American timber has been seen in this port, and there seems to be little or no disposition on the part of dealers in American timber to enter this market.

#### IMPORTATION OF AMERICAN GOODS.

It gives me great pleasure to report that the consumption of American provisions is steadily on the increase. Our canned meats seem to be gradually taking the place of the products of England and Germany, which countries formerly had the entire monopoly of this trade. Not only our canned meats, but American hams, bacon, lard, fresh pork, &c., find an ever-increasing demand. The provisions put upon this market seem to be of the very best quality, and appear to be put up in excellent condition, for so far they have given entire satisfaction, and no complaint is heard in any quarter.

I regret to say, however, that no successful effort has been made by any American house to put itself in direct communication with dealers here, and consequently whatever American goods are imported here are imported from England or under the auspices of English houses. I have so often shown the disadvantages of this circuitous way of introducing our products in this country that I need not here restate the causes. Let me say, however, that it is utterly useless for dealers in and exporters of American goods to hope to successfully introduce any products into this country by sending out circulars which the people cannot read and engravings which they do not understand. Such literature is simply lost on the people of this country, and no amount of explanation can make them realize the advantages of any machine or implement the application of which they have not seen. There is, in my opinion, but one way to successfully introduce the products of our industries into this country, and that is to establish depots where the products of our manufactories may be inspected. Without such arrangement as this, all other efforts must inevitably result in failure.

Some American wheat was sold in this market during the spring, but did not give a very satisfactory result. This was owing, I think, to the fact that the wheat was purchased in Liverpool, and that it was not shipped in good condition. When put upon the market here, it was quoted at an inferior price, and disposed of at considerable loss to the importer. Some American corn was also put upon this market, with more satisfactory results; for, while no large profits were realized, no losses were reported. And just now, samples of American flour are being shown in this market, from which experiment I hope for more favorable results.

The one great drawback in all these efforts to introduce American cereals in this market is the fact that the cargoes offered for sale here are bought second-hand in England or France, as the case may be.

#### EXPORT OF FRUIT TO THE UNITED STATES.

The subjoined tabular statement will be found interesting to dealers in Malaga fruit, as showing the distribution to the different American cities.



The lateness of the raisin crop, together with the active demand in the United States, caused a sudden rise in prices at the beginning of the vintage, and these prices steadily advanced until the current layer raisin was sold for 30 reals, or \$1.50, with the finer classes bringing correspondingly higher prices.

These prices are still maintained, although there are very few buyers and little activity in the market. The remaining stock of raisins is estimated at something under 300,000 boxes, the greater part of which is destined to be shipped to the United States, as the other countries that consume this article have already received their quota.

*Resumé of the principal exports from Malaga to the United States during the year 1879.*

Months.	Raisins.					
	Wholes.	Halves.	Quarters.	Eighths.	Fralls.	Totals of boxes.
January .....	93, 826	475	1, 552	.....	4, 206	.....
February .....	40, 426	615	109	.....	894	.....
March .....	20, 575	527	2, 026	.....	.....	.....
April .....	14, 615	.....	24	.....	.....	.....
May .....	54, 114	82	.....	.....	.....	.....
June .....	.....	.....	.....	.....	.....	.....
July .....	26, 904	.....	.....	.....	.....	.....
August .....	5, 669	.....	.....	.....	.....	.....
September .....	224, 225	12, 930	43, 840	168	4, 232	.....
October .....	387, 037	19, 019	90, 460	2, 095	8, 772	.....
November .....	88, 432	3, 429	10, 196	844	1, 520	.....
December .....	138, 474	233	6, 152	128	2, 260	.....
Total .....	1, 094, 297	37, 260	155, 359	4, 235	22, 874	1, 152, 296

Months.	Almonds.		Lemons.	Palm nuts.	Lead.	Oranges.	
	Boxes.	Bags.	Boxes.	Bales.	Bars.	Cases.	Tierces.
January .....	.....	161	171	59	400	.....	.....
February .....	88	235	407	171	.....	.....	.....
March .....	435	.....	184	129	.....	.....	.....
April .....	.....	.....	425	.....	.....	.....	.....
May .....	44	.....	.....	27	.....	.....	.....
June .....	.....	.....	.....	.....	.....	119	.....
July .....	.....	.....	887	187	.....	.....	.....
August .....	470	.....	2, 888	62	761	.....	.....
September .....	2, 423	.....	34, 775	115	.....	.....	.....
October .....	2, 088	100	23, 076	119	.....	618	.....
November .....	590	.....	6, 083	100	450	1, 466	218
December .....	59	.....	821	96	2, 116	1, 145	1, 590
Total .....	6, 217	496	69, 717	1, 015	3, 727	3, 348	1, 808

*Distribution to the different American cities.*

Cities.	Raisins.					
	Wholes.	Halves.	Quarters.	Eighths.	Fralls.	Totals of boxes.
New York .....	972, 604	30, 700	134, 024	4, 171	21, 929	.....
Boston .....	72, 706	1, 214	7, 522	64	250	.....
New Orleans .....	7, 300	1, 807	3, 200	.....	.....	.....
Philadelphia .....	19, 624	1, 232	4, 713	.....	697	.....
Saint Louis .....	4, 500	.....	.....	.....	.....	.....
Chicago .....	14, 700	500	2, 900	.....	.....	.....
Baltimore .....	2, 863	1, 807	3, 000	.....	.....	.....
Total .....	1, 094, 297	37, 260	155, 359	4, 235	22, 876	1, 152, 296

*Distribution to the different American cities—Continued.*

Cities.	Almonds.		Lemons.	Palm nuts.	Lead.	Oranges.	
	Boxes.	Bags.	Boxes.	Bales.	Bars.	Cases.	Tierces.
New York.....	4,853	496	68,230	1,015	3,727	3,069	1,888
Boston.....			587			279	
New Orleans.....			300				
Philadelphia.....	1,364		600				
Saint Louis.....							
Chicago.....							
Baltimore.....							
Total.....	6,217	496	69,717	1,015	3,727	3,348	1,888

It will be seen from the preceding tables that the United States consume considerably over one-half of the entire crop of this province. The whole amount of exports from this port to the United States during the past year is valued at \$1,952,293, while the imports from the United States to this port are inconsiderable in value.

In a former report I spoke of a tendency to make Malaga the point of distribution for raisins and other fruit instead of taking them over to America in large bulks and distributing from our Atlantic cities as heretofore. This tendency becomes more marked each year, imposing additional labor on this consulate.

## IMPORTS AND EXPORTS OF SPAIN.

I fear that American exporters do not fully realize the importance of the Spanish trade. They seem to think that it is not worth a special effort. We make great efforts and not a few sacrifices to open up direct commercial relations with Italy and South America, while the Spanish trade is left to develop itself or fail. Yet Spain possesses a population of twelve millions of souls, a nation whose wants are more largely supplied from abroad than perhaps any other people in Europe.

*Resumé of articles exported from the Spanish Peninsula and Balearic Islands during the first nine months of the year 1879.*

Articles.	Quantity.	Value.
		<i>Pisetas.</i>
Olive oil..... kilograms	10,271,328	9,155,292
Spanish brandy..... litres	2,881,923	1,690,214
Freezees..... kilograms	1,271,490	2,742,863
Corks..... do.	1,380,101	9,251,290
Timber..... do.	1,504,578	748,952
Bales of grass..... do.	22,741,924	5,163,219
Manufactured grass..... do.	1,094,877	263,966
Anise..... do.	271,362	161,817
Saffron..... do.	28,828	1,446,300
Cumin..... do.	135,855	59,131
Ground pepper..... do.	476,801	297,592
Almonds..... do.	2,465,885	3,455,800
Filberts..... do.	3,718,635	1,931,299
Peanuts..... do.	679,764	258,307
Raisins..... do.	14,362,963	9,631,646
Unclassified fruit (dried)..... do.	1,526,635	469,383
Lemons..... do.	2,454,199	441,754
Oranges..... kilograms	3,109,874	50,144,586
Grapes..... kilograms	5,800,393	1,624,538
Unclassified fruit (green)..... do.	2,588,694	746,115
Cattle..... number	66,069	4,754,935
Canary seed..... kilograms	704,490	183,165
Rice..... do.	840,143	878,062
Oats..... do.	1,638,908	379,620
Barley..... do.	2,042,090	335,801
Rye..... do.	2,087,390	569,355
Wheat..... do.	1,142,162	309,791
Flour..... do.	21,932,485	7,782,123

*Resumé of articles exported from the Spanish Peninsula, &c.—Continued.*

Articles.	Quantity.	Value.
Soap .....	kilograms..	<i>Pescetas.</i>
Wool .....	do.....	2,688,087
Chica pease .....	do.....	4,580,084
Locust beans .....	do.....	1,453,408
Beans .....	do.....	4,767
French beans .....	do.....	141,086
Mercury .....	do.....	65,500
Copper .....	do.....	9,793,495
Carpentry tools .....	do.....	12,329,186
Lead .....	do.....	2,068,541
Zinc .....	do.....	37,802,860
Copper and mineral .....	do.....	1,180,818
Iron ore .....	do.....	26,860,023
Other minerals .....	do.....	8,066,727
Paper .....	do.....	3,943,025
Vermicelli .....	do.....	1,846,369
Licorice .....	do.....	1,471,364
Salt .....	do.....	1,026,252
Raw silk .....	do.....	2,564,679
Wine .....	litres..	1,447,345
Total value of exports .....		121,124,458
		353,860,487

*Resumé of articles imported into the Spanish Peninsula and Balearic Islands during the first nine months of the year 1879.*

Articles.	Quantity.	Value.
Coals .....	tons..	<i>Pescetas.</i>
Asphaltum and crude petroleum .....	kilograms..	16,872,875
Raffined petroleum .....	do.....	2,599,724
Glassware .....	do.....	6,675,642
Steel .....	do.....	2,535,801
Hardware .....	do.....	1,180,850
Tin and copper ware .....	do.....	11,806,810
Wire .....	do.....	1,007,334
Dye woods and bark .....	do.....	979,668
Other vegetable products not classified .....	do.....	508,261
Paint and varnish .....	do.....	1,111,615
Chloride of soda .....	do.....	3,577,840
Drugs and chemicals .....	do.....	35,428
Perfumery .....	do.....	11,217,270
Raw cotton .....	do.....	750,000
Cotton goods .....	do.....	53,454,741
Spun cotton .....	do.....	7,943,912
Spun hemp .....	do.....	894,300
Spun goods .....	do.....	12,750,019
Wool .....	do.....	3,063,576
Woolen goods .....	do.....	3,609,704
Raw silk .....	do.....	17,550,078
Silk goods .....	do.....	4,526,627
Mixed goods .....	do.....	4,870,071
Paper .....	do.....	2,648,722
Timber .....	cubic inches..	4,631,073
Furniture .....	kilograms..	16,078,109
Cattle .....	number..	2,183,206
Leather skins .....	kilograms..	3,750,896
Machinery, telegraph apparatus .....	kilograms..	12,890,421
Materials for the same .....	kilograms..	13,092,973
Carriages .....	number..	592,959
Vessels .....	tons..	594,088
Cod-fish, dried fish, &c. .....	kilograms..	12,817,721
Barley, oats, and corn .....	do.....	11,296,190
Wheat .....	do.....	30,960,154
Flour .....	do.....	6,479,238
Sugar .....	do.....	19,845,181
Cocoa .....	do.....	929,790
Coffee .....	do.....	99,017
Cinnamon .....	do.....	799,017
Brandy .....	hectolitres..	18,311,315
Wines .....	litres..	555,015
Buttons .....	kilograms..	833,775
Laces .....	do.....	1,450,470
Total value of imports .....		841,129,827

The preceding tables are compiled from data found in official statements; but it is safe to assume that the real value of the exports and imports is much greater than here given, since it is a notorious fact that all the articles named in these tables are passed through the custom-house at not more than four-fifths of their true value by collusion with the minor custom-house officials.

It will be seen that the two largest items of articles imported into Spain are cotton and wheat. The first-named article is supplied by the United States, and a large proportion of the wheat is of American production, though bought by Spanish merchants in European markets. Spain, taken as a whole, does not produce sufficient breadstuffs for home consumption, and when the crop of cereals is short the question of subsistence becomes alarming. During the spring of last year, information which seemed to be reliable indicated that the crop of cereals, and especially wheat and other breadstuffs in this country, would fall far short of the necessities for the ensuing year.

The question of subsistence became so alarming that it engaged the serious attention of the government. I understood at the time that agents were sent into the different provinces with a view to ascertain the extent of the failure in the crop of cereals; and there was reason to believe that if the results of their investigations should coincide with the information already received the government was prepared to make a large reduction in the duties imposed on wheat and other cereals in order to encourage the importation of foreign breadstuffs. But if the investigation ever took place none of its results were made public; the government, after having considered the subject in cabinet council, declined to make any reduction whatever in the duties. Meanwhile, breadstuffs are steadily advancing, wheat now selling in this market at 63 reals per fanega, or at \$2.10 per bushel.

#### GENERAL SHIPPING INTERESTS.

American shipping at this port during the past year was insignificant. Only six American vessels entered this port, with an aggregate tonnage of 2,803. This is a sad falling off from the times when our flag floated from a hundred different masts in this harbor.

There is a slight falling off in the number of British ships as compared with the preceding year, but there is a considerable increase in tonnage. In 1878, 259 English vessels, with an aggregate tonnage of 158,008, entered this port. In 1879, 254 English vessels, with an aggregate tonnage of 172,108, entered this port, showing a decrease in numbers of vessels, but an increase of tonnage of 14,100. I subjoin a table giving the number and different nationality of vessels which entered this port during the past year:

English .....	254
French .....	119
Dutch .....	16
German .....	60
Norwegian .....	33
Swedish .....	18
American .....	6
Russian .....	8
Portuguese .....	17
Austrian .....	1
Belgian .....	2
Danish .....	11
Italian .....	19
Spanish .....	2,417
<b>Total number of vessels .....</b>	<b>3,002</b>

The question of the revival of differential duties on foreign vessels trading in Spanish waters having been seriously discussed some time during the past year, the government appointed a commission to inquire into the condition of the Spanish mercantile marine and to ascertain what had been the effect of the suppression of said duties. From this inquiry it results that the Spanish mercantile marine is steadily increasing in importance.

From some statistics submitted by the commission, it appears that the mercantile marine of Spain consists of 1,940 sailing vessels and 334 steamships, with an aggregate tonnage of 553,253. Added to this are 34,056 vessels, carrying less than 50 tons each, engaged in fishing and light coasting trade, aggregating a tonnage of 260,865, making in all 814,118 tons.

I regard some of the general conclusions of the commission so important that I think I cannot do better than to transcribe some paragraphs of their report. After showing the proportion existing between the foreign and national vessels engaged in the Spanish trade, it continues: "From the data given above it results that the total amount of the annual maritime movement in Spain represents 1,182,797 metrical tons, something less than 100,000 tons per month, or a little over 3,200 tons per day for the whole of Spain. The maritime movement with Europe amounts to 940,000 tons annually; that is to say, 2,600 tons per day.

In discussing this question the enormous development of steam-vessels must be taken largely into consideration. One steamship is of more service than many sailing vessels, and in our mercantile marine this development is very striking. The important item of the exportation of wine may be said to be entirely carried on by lines of steamers which make on an average three trips per month.

It is evident that sailing vessels cannot compete in this trade. Cadiz has no marine matriculation of its own, yet 110 Spanish steamers, belonging to 17 lines, touch at this port, taking cargoes for America, the Philippine Islands, North Europe, Africa, the Canaries, Cantabrian and Mediterranean ports. There are also 8 lines of foreign steamers bound to North Europe, North America, Rio de la Plata, &c.

This represents the development of a few years, which has completely changed the character of navigation. Admiral Janregnier, the present minister of marine in France, impressed with the truth of the above asseveration, in addressing the Chamber of Deputies, says that only steamships should be constructed, and that the *vieux sabots* (an ironical name applied to sailing vessels) should be left out of view.

I have quoted at length from this report, because it embodies much reliable information in regard to Spanish maritime commerce, and some general views which I think should be very earnestly considered by those who wish to aid in reviving our prostrate shipping interests.

#### AGRICULTURAL INTERESTS.

I regret that I am unable to report any advance in the methods of tilling the soil, or any marked improvement in the condition of the agricultural classes.

#### RAISIN CROP.

The results of the raisin crop have come far short of what was anticipated at the beginning of the year. It was supposed that the copious winter rains, followed by a favorable spring, would have insured a very

large raisin crop. These anticipations have not been realized; for while the appearance of the grape, as it began to develop on the vine, seemed to bear out the expectation of a good crop both in quality and quantity, it was found that in the process of drying the grape shriveled to such an extent that the crop fell much below the average and was of only middling quality.

The yield was hardly two million boxes, thus falling two hundred thousand boxes below the crop of the previous year. There has been some compensation for the disappointment as to the size of the crop in the rise of prices, to which I have already alluded; but this compensation has not been commensurate with the losses which the cultivators of the raisin are yearly sustaining. A people more energetic and less given to routine than the people of this province would endeavor to introduce a greater diversity in their agriculture, since it is evident that neither the raisin nor wine has given them profitable returns for many years.

The depression in this department of Spanish agriculture arises from over-production. The provinces of Malaga and Valencia produce in average years over five million boxes of raisins, while they rarely or never produce sufficient cereals for home consumption. It results that the raisins have to be hauled about in the markets of the world, while breadstuffs and other necessities of life must be brought from abroad.

#### THE PHYLLOXERA.

The phylloxera seems to be making steady headway among the vineyards of this province. Little or nothing has been done to arrest its progress, and I am credibly informed that vineyards embracing sixteen square leagues have been attacked by the dread insect. This does not mean that all the vineyards embraced within this area have been destroyed, or that all the vines have been attacked. It is to be understood, I apprehend, that in all the vineyards within this area some traces of the phylloxera are to be found. I have been informed by a member of the commission which is endeavoring to find means to stop its further ravages that it has progressed so far that it will be extremely difficult, if not impossible, to arrest it.

#### OLIVE OIL.

The agricultural product next in importance is olive oil. This product is shipped chiefly to France, England, Germany, and Russia; but as Italy, which is also a large oil-producing country, competes in the same markets, and as Spanish home consumption is very large, it is only when we have a very large yield that there are any considerable shipments for foreign markets. Last year, owing to the small yield, the shipments fell off more than one-half as compared with the preceding year, and although the present crop is supposed to be something larger than the last, olive oil is still quoted in this market at 42 reals (\$2.10) per arroba, at which price it is impossible to make shipments.

#### WINE.

The production of wine enters very largely into the agricultural arrangements of this province, but, like nearly every other agricultural interest, it has shown a manifest tendency to decline within the last few years.

The decline in the wine interest is principally due to the custom regulations of England, whereby Spanish wines, being of very high grades, are almost entirely excluded from the English market. As England was formerly a very large, if not the largest, consumer of Malaga wines, existing regulations in England bear very heavily on wine producers here. The Spanish Government has made repeated efforts to obtain a modification of these regulations, but so far without success.

I am greatly surprised that more of the wines of this province are not put upon the American market. There are some wines produced here which appear to me to be peculiarly adapted to American consumption. The Montilla wine is very similar to sherry, being, however, much lighter and possessing a more delicate flavor. Then there is the Malaga dry wine, which is often mistaken, and no doubt often sold, for real sherry. There is also the Muscatel wine—a rich, luscious wine with a delightful aroma. These, together with other lighter wines, seem well adapted to American consumption.

#### SUGAR PRODUCT.

The only agricultural interest that seems to be making any progress is that of sugar-cane. This interest, having been specially fostered by the government, has assumed an importance far excelling any other interest in the province and equalling that of any other in the Spanish Peninsula. The government gives to the sugar producer a bonus of about 33 per cent. on capital invested, or, in other words, it imposes a special duty of 33 per cent. ad valorem on all sugar coming from Cuba, which amounts to practical exclusion of the Cuban article. This protection of the sugar-producing interests of the peninsula has given rise to powerful monopolies that are rapidly buying all the lands suitable for this culture to be found in the provinces of Malaga, Murcia, and Valencia. Those engaged in producing sugar in the peninsula were greatly alarmed by the advent to power of General Martinez Campos, who was pledged to the abolition of all duties discriminating against Cuba, since the abolition of such duties would tend greatly to diminish, if not to entirely neutralize, the enormous profits now realized from this production. When the government of General Campos undertook to carry out the promised fiscal reforms it found the sugar interest of Andalusia on the one hand, and the interests of the flour mills of Castile and other northern provinces arrayed in solid phalanx against it. And to the powerful agencies they put in motion, more than to any other cause, was due the fall of the government of General Campos and the return of Canovas del Castillo to power.

The present government is endeavoring to satisfy the claims of Cuba without bearing any sensible injury to the conflicting interests of the peninsula—an exceedingly difficult and delicate task, seeing that the interest of the two countries are diametrically opposed to each other.

#### PUBLIC WORKS AND RAILWAYS.

I am able to report but little progress in public improvements during the past year. On the 1st of July the new market, a fine structure, was thrown open to the public, which has greatly added to the convenience of this city. The work for the enlargement of the harbor goes on very slowly, but we are promised more vigorous efforts in the spring. I

think the following detailed statement in regard to the railways in the Spanish peninsula will be found interesting.

	Kilometers.
From Madrid to Saragossa and Alicante .....	1,558
From Madrid to Santander .....	1,781
The Northeastern .....	434
From the Triano to the mouth of the river of Bilbao .....	8
From Medina del Campo to Zamora and from Orense to Vigo .....	158
From Medina del Campo to Salamanca .....	77
From Santiago to Salamanca .....	43
From Tarragona to Barcelona and thence to the French frontier .....	349
From Granollers to San Quirico de Berosa .....	65
From Barcelona to Sarria .....	5
From Tarragona to Lerida .....	103
From Almansa to Valencia and Tarragona .....	393
From Silla to Cullera (narrow gauge) .....	26
From Saragossa to La Puebla de Higue .....	70
From Madrid to Malpartida de Plasencia .....	235
From Madrid to Badajoz .....	603
Andalusian railways .....	704
From Seville to Alcala and Carmona .....	31
From Merida to Seville .....	100
From Buitron to San Juan del Puerto .....	49
From Tharsis a Odiel .....	46
From Palma to Manacor and to la Puebla .....	77
Total kilometers in the Spanish peninsula .....	9,047

#### POPULATION.

The population of Malaga is rapidly increasing, but as no census has been taken for some years I am unable to state the numbers with accuracy. Official statistics put the population of the province 500,231 souls, while the area of the province is said to be 734,879 hectares, according to which statement there is 1.47 hectares for each person, which fact shows that the province is not too densely inhabited, considering that this gives an average of  $3\frac{1}{2}$  acres to each person. Some time during last year the government established a national bureau of vital statistics. This department has lately published some very interesting statements in regard to the general movement of the population of the peninsula. Those corresponding to the month of September are both interesting and instructive.

The number of births in this province in the month of September is put down at 1,596, showing a proportion of 3.190 per thousand. The number of deaths is put down at 1,717, showing the proportion of deaths to be 3.432 per thousand. It results that there is a national decrease in the population of this province of 0.242 per thousand. Taking still another classification, we find that of 1,576 births in this province during the same period 44 are reported illegitimate, but statistics for the month of October show an increase of illegitimacy, since out of 1,590 births there were 70 illegitimate. These statistics are published monthly, and reveal many interesting facts in regard to the moral and social condition of the Spanish people, in regard to which I regret that I cannot speak more at length in this report.

#### PUBLIC HEALTH.

The sanitary condition of Malaga during the last year has, on the whole, been satisfactory. No epidemic of any kind has visited this port, and very few infectious diseases have been reported. Toward the close of the year I learned that there was some uneasiness at the in-



crease of small-pox, but I believe that it has not made any alarming progress.

No adequate measures are taken for cleaning the streets of Malaga, and in this, as in many other things, there is great room for improvement. Our exemption from epidemics is due more to the fine climate and to the strenuous and successful efforts of the sanitary authorities to prevent the introduction of infectious diseases than to any internal precaution. I cannot refrain from repeating the meed of praise accorded to these officials in my last report for the strict and faithful manner in which they enforce the health regulations of this port.

JOHN T. QUARLES.

UNITED STATES CONSULATE,  
Malaga, February 26, 1880.

### TARRAGONA.

*Statement showing the value of declared exports from the consular-agency district of Tarragona to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Wine.....	\$13,609 85	\$35,113 87	\$32,039 36	\$8,527 43	\$89,290 51
Almonds.....		35,678 13	6,987 00	57,191 50	99,856 63
Total in United States gold.....	13,609 85	70,792 00	39,026 36	65,718 93	189,147 14
Total preceding year.....	53,817 75	70,616 72	13,872 62	22,490 99	160,798 08
Increase.....		175 28	25,153 74	43,227 94	28,349 06
Decrease.....	40,207 90				

UNITED STATES CONSULATE,  
Barcelona, November 1, 1879.

FRED. H. SCHENCK.

### GIBRALTAR.

*Report, by Consul Sprague, on the navigation at Gibraltar and the imports from the United States for the year ending September 30, 1879.*

I beg to inclose herewith statement showing the navigation of Gibraltar during the year ending the 30th ultimo.

As appears therein, the total number of steamers that have entered this port during that period was 3,647, and that of sailing vessels 903, besides a large fleet of coasting lateen crafts under Spanish and Portuguese flags.

These figures show a considerable falling off in the number of sailing vessels of all nationalities arriving at this port compared with preceding years, especially under the British flag; at the same time the deficiency is fully made up in the increase of 492 British steamers of large tonnage.

There were 279 steamers which cleared for ports in the United States, namely: 275 British, 1 Dutch, 1 Belgian, 1 French, 1 German, principally for New York, loaded with valuable cargoes from China, India,

and the Mediterranean ports, with the exception of 60 steamers which went in ballast, chiefly for Southern ports in the United States, many of them having discharged coal at this port which they had brought here from England.

I may say the past year has been one of considerable activity in the trade of Gibraltar connected with the United States, especially in flour and petroleum. The demand for the former article was to meet chiefly the wants from indifferent crops of the Morocco and Portuguese markets, where scarcity prevailed until the new crops came in.

At present, with the advanced ruling prices in the United States, there is little or no encouragement for the importation of cereals from the United States. The supplies of flour are now coming freely from Marseilles.

The importations of American produce direct from the United States have been, as near as can be ascertained, as follows: 44,131 barrels of flour, 2,694 bags of flour, 1,693 hogsheads of tobacco, 2,535 cases of tobacco cuttings, 319 cases of tobacco scraps, 1,266 packages of manufactured tobacco, 12 packages of snuff, 48,893 cases of refined petroleum, 5,800 cases of Florida water, 975 barrels of alcohol, 25 barrels of crushed sugar, 110 cases of sarsaparilla, 17,957 bushels of corn, 11,028 bushels of wheat.

A decline may be noticed in the quantity of tobacco in hogsheads imported during the present year, which is not surprising, considering the strong disposition that has for some time been evinced on the part of the local authorities of Gibraltar to co-operate with the Spanish Government for the suppression of the contraband traffic from Gibraltar, and which consists in enforcing severe restrictions in the departure from this port of Spanish lateen coasting crafts, by hindering them to leave port after sunset, besides having the bay patrolled by a government steam launch at most all hours; measures which meet the full approbation of the Spanish Government. Nevertheless, contraband is still carried on, and will doubtless continue so with more or less activity, so long as Gibraltar is a free port, the weed a monopoly in Spain, and her revenue officials yet somewhat deficient in the performance of their prescribed duties.

The increase in the number of steamers calling at this port to replenish their stock of fuel naturally causes a continued increase in the importation of and traffic in coal, which, notwithstanding its exclusive importation from England, rules at the moderate price here of about \$5.25 per ton of 2,240 pounds English; a circumstance which may be ascribed to the immense competition among the British coal-dealers themselves.

There are no less than nine establishments here engaged in the selling of coal, and their sales during the past year reach 240,000 tons, which at present forms the most important branch of trade here.

HORATIO J. SPRAGUE.

UNITED STATES CONSULATE,  
*Gibraltar, October 4, 1879.*

Statement showing the navigation at the port of Gibraltar for the year ending September 30, 1879

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Austrian				25		25	
Belgian		38					
British		2,709		407		3,116	
Danish		9		19		28	
Dutch		45		32		77	
French		294		41		335	
German Confederation		23		39		62	
Greek		13		16		29	
Guatemala				1		1	
Italian		30		68		98	
Jerusalem				4		4	
Mexican				2		2	
Norwegian		64		83		147	
Portuguese				29		29	
Russian		7		22		29	
Swedish		19		37		56	
Spanish		396		17		413	
United States of America.	United States			22			
	Sicily			15			
	France			5			
	Italy			4			
	Spain			3			
	Peru			3			
	Greece			2			
	Malta			2			
	Algeria			1			
	India			1			
	Turkey			1			
	Austria			1			
	Portugal			1			
Total		3,647		903		4,550	
Flag.	To—	CLEARED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Austrian				24		24	
Belgian		38				38	
British		2,701		398		3,099	
Danish		9		19		28	
Dutch		45		31		76	
French		294		38		332	
German Confederation		22		36		58	
Greek		13		15		28	
Guatemala				1		1	
Italian		30		64		94	
Jerusalem				4		4	
Mexican				2		2	
Norwegian		63		80		143	
Portuguese				22		22	
Russian		7		22		29	
Swedish		19		35		54	
Spanish		391		15		406	
United States of America.	United States						
	Sicily						
	France						
	Italy						
	Spain						
	Peru						
	Greece			61	32,568.11	61	32,568.11
	Malta						
	Algeria						
	India						
	Turkey						
	Austria						
	Portugal						
Total		3,632		867		4,499	

## PORTUGAL.

## PORTUGUESE POSSESSIONS.

## FAYAL.

*Report, by Consul Dabney, on the trade and commerce of Fayal, for the year ending June 30, 1879.*

I have the honor to submit the following tabulated returns for the fiscal year, June 30, 1879, of the imports, exports, trade with the United States, and navigation at this port.

There has been an increase of imports with this island from the United States, and this increase will continue, I am convinced, as the various articles of our manufacture come into notice and their excellence becomes appreciated. Many of our manufactures are, however, for the present excluded from the markets of Portugal by the higher rates of duty levied thereon than the rates which are levied on like articles from countries which have commercial treaties with that country.

S. W. DABNEY.

UNITED STATES CONSULATE,  
Fayal, November 10, 1879.

*Statement showing the imports at Fayal for the year ending June 30, 1879.*

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
Animal products ..... pounds	33, 181	\$3, 719 36	\$725 45	United States, France, and England.
Cereals ..... do.	2, 272, 071	40, 418 39	2, 174 39	United States and England.
Cottons ..... do.	144, 236	36, 227 40	10, 289 19	United States, England, and France.
Fisheries ..... do.	255, 180	9, 431 12	3, 463 85	United States and British North America.
Glass and earthen ware .. do.	44, 837	1, 434 83	585 48	United States and England.
Linen ..... do.	10, 311	1, 371 84	259 32	Great Britain and France.
Liquors ..... gallons.	1, 052	6, 886 90	4, 967 29	Great Britain, United States, Holland, and France.
Medicines ..... pounds.	455, 047	1, 712 94	36 68	Great Britain, United States, and France.
Metal ..... do.	146, 754	8, 616 89	963 14	Great Britain and United States.
Minerals ..... do.	5, 428, 379	9, 743 90	2, 132 86	Do.
Paper, and its application. do.	2, 270	510 16	64 09	Great Britain, United States, and France.
Silk ..... do.	441	2, 385 71	830 02	Great Britain.
Sugar, tea, coffee, tobacco, &c. .... pounds.	492, 397	34, 124 08	18, 818 18	United States, England, Holland, Brazil, &c.
Sundries ..... do.		37, 927 02	2, 893 64	United States, England, France, and Brazil.
Vegetables ..... do.	47, 116	1, 289 32	203 74	Do.
Wood ..... do.		18, 663 63	2, 776 89	United States and British North America.
Woolens and furs ..... pounds	7, 724	8, 813 16	3, 863 11	United States, England, and France.
		223, 276 65	55, 047 32	

*Statement showing the exports and re-exports from Fayal for the year ending June 30, 1879.*

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Animal products .... pounds.	105, 613	\$2, 844 02	England and Portugal.
Cereals ..... do.	218, 541	3, 706 28	Portugal.
Liquors ..... gallons.	1, 216	6, 745 72	Germany and United States.
Minerals ..... pounds	87, 945	509 15	Brazil.
Straw-work ..... do.		59, 113 57	United States.
Sundries ..... do.		4, 680 88	United States, England, Brazil, Portugal, &c.
Vegetables ..... do.		3, 395 75	United States and Brazil.
		80, 995 37	

Statement showing the imports and exports between Fayal and the United States for the year ending June 30, 1879.

Articles.	Imports.		Exports.	
	Amount*.	Value.	Amount.	Value.
Animal products..... pounds.....	30, 219	\$3, 165 37		
Cereals..... do.....	851, 120	21, 468 27		
Cottons..... do.....	101, 523	22, 011 71		
Embroideries.....				\$170 47
Fish..... pounds.....	251, 947	9, 006 79		
Glass and earthen ware..... do.....	25, 882	521 42		
Metal..... do.....	31, 679	1, 386 05		
Minerals..... do.....	134, 387	3, 244 80		
Oranges..... { boxes.....			8, 211	} 6, 381 06
Paper..... { baskets.....			176	
Straw-work..... pounds.....	590	137 59		
Sundries..... No. of hats.....			308, 505	59, 113 97
Tobacco..... pounds.....	368	187 39		412 92
Vegetables..... do.....	19, 940	295 04		
Wood.....		16, 799 31		
Woolens and furs..... pounds.....	319	290 96		
Willow-work.....				152 41
		88, 257 94		66, 230 43

Statement showing the navigation at the port of Fayal for the year ending June 30, 1879.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American.....	Whaling.....			45	11, 321	45	11, 321
	United States.....	5	5, 190	18	6, 431	23	11, 621
	St. Michaels.....	4	4, 153	6	938	10	5, 091
	Flores.....	1	1, 038			1	1, 038
	Liverpool.....			1	1, 131	1	1, 131
	Madeira.....	1	1, 038	1	409	2	1, 447
	Cape de Verde.....			1	170	1	170
	Philadelphia.....			1	425	1	425
	Galatz.....	1	979			1	979
	Brazil.....	3	3, 143			3	3, 143
Austrian.....	do.....	1*	3, 078			1	3, 078
	England.....	3	2, 778	9	2, 108	12	4, 886
	Cronstadt.....			1	532	1	532
	Barbadoes.....			1	85	1	85
	British North America.....			2	293	2	293
	United States.....	20	25, 807	2	496	22	26, 303
	Dunkirk.....			1	563	1	563
	Trapani.....			1	154	1	154
	St. Michaels.....			1	178	1	178
	Havre.....			1	596	1	596
Dutch.....	Ascencion.....	1*	970			1	970
	Porto Plata.....	1	951			1	951
	Hamburg.....			1	295	1	295
	France.....			2*	3, 100	2	3, 100
	do.....			1	433	1	433
	From sea.....			2*	3, 100	2	3, 100
	Cayenne.....	1*	400			1	400
	Cadiz.....			1	169	1	169
	Porto Cortez.....			1†	431	1	431
	West Indies.....	2	3, 762			2	3, 762
German.....	United States.....			1†	403	1	403
	Costa Rica.....			1	364	1	364
	Mexico.....			1	240	1	240
	Peru.....			1†	591	1	591
	Monte Video.....			1	253	1	253
	United States.....			1	554	1	554
	England.....			1	746	1	746
	Terceira.....			1	210	1	210
	St. Thomas.....	1*	1, 400			1	1, 400
	Norwegian.....						

\* Men-of-war.

† Vessels condemned.

Statement showing the navigation at the port of Fayal, &amp;c.—Continued.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Norwegian .....	Cardiff .....			1	285	1	285
Portuguese .....	Portugal and islands .....	36	37,644	13	1,988	49	39,632
	United States .....			1	162	1	162
	Whaling .....			2	324	2	324
Spanish .....	United States .....			1	123	1	123
	Havana .....	1	453			1	453
	Total .....					208	132,375
Flag.	To—	CLEARED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
American .....	Whaling .....			45	11,321	45	11,321
	United States .....	5	5,100	18	6,431	23	11,621
	St. Michaels .....	4	4,153	6	928	10	5,081
	Flores .....	1	1,038			1	1,038
	Liverpool .....			1	1,131	1	1,131
	Madeira .....	1	1,038	1	409	2	1,447
	Cape de Verde .....			1	170	1	170
Austrian .....	Philadelphia .....			1	425	1	425
British .....	Galatz .....	1	979			1	979
	Brazil .....	3	3,143			3	3,143
	do .....	1	3,078			1	3,078
	England .....	3	2,778	9	2,108	12	4,886
	Cronstadt .....			1	532	1	532
	Barbadoes .....			1	85	1	85
	British North America .....			1	121	1	121
	United States .....	20	25,807	1	183	21	25,494
	Dunkirk .....			1	563	1	563
	Trapani .....			1	154	1	154
	St. Michaels .....			1	178	1	178
	Havre .....			1	596	1	596
	Ascencion .....	1	970			1	970
	Porto Plata .....	1	951			1	951
Dutch .....	Hamburg .....			1	285	1	285
French .....	France .....			2	3,100	2	3,100
	do .....			1	433	1	433
	From sea .....			2	3,100	2	3,100
	Cayenne .....	1	400			1	400
	Cadiz .....			1	169	1	169
	Porto Cortez .....						
	West Indies .....	2	3,762			2	3,762
	United States .....						
	Costa Rica .....			1	364	1	364
German .....	Mexico .....			1	240	1	240
Italian .....	Peru .....						
	Monte Video .....			1	253	1	253
	United States .....			1	554	1	554
	England .....			1	746	1	746
	Terceira .....			1	210	1	210
Monaco .....	St. Thomas .....	1	1,400			1	1,400
Norwegian .....	Cardiff .....			1	285	1	285
Portuguese .....	Portugal and Islands .....	36	37,644	13	1,988	49	39,632
	United States .....			1	162	1	162
	Whaling .....			2	324	2	324
Spanish .....	United States .....			1	123	1	123
	Havana .....	1	453			1	453
	Total .....					203	129,969

\* Vessels condemned.

Man-of-war.

## ITALY.

*Report, by Consul-General Schuyler, of Rome, on the commerce, navigation, agriculture, finances, taxation, currency, railways, post-offices, telegraphs, lotteries and savings banks, and emigration of Italy, 1877, 1878, and 1879.*

On coming for the first time to a country it requires no little preliminary study into its resources and its economical history before being able to have any opinion as to its present condition. In the present case my task has been one of extreme difficulty. I arrived at this post in September, 1879, and, while I have had to carry on the multifarious duties of this office without assistance, the consular clerk being ill, I have felt it necessary to make the acquaintance of officials and merchants, to inquire into the state of the different consulates under my jurisdiction, and to study the general conditions governing the trade between Italy and the United States.

No report on the economical state of a country is of any practical use unless it is comparative. It is not sufficient to set down the mere statistics of commerce, manufactures, and population, unless some deduction can be made from these statistics as to the progress or retrogression of the country. In judging of the present situation of Italy, it is necessary to take into account the history of the country for the last twenty years, and the financial and economic changes which have resulted from the union of several small states into one large one.

Materials for a careful inquiry into all the changes in the economical situation of Italy for the last twenty years are not always procurable. The zealous and careful labors of Italian statisticians enable one to see fairly well the actual state of the country. While differences of method in preparing and compiling their statistics render it not always easy to compare the situation of one country with that of another, yet for a comparative view of the state of any one country at different periods of time these are unimportant. There is the same equation of error to be accounted for year after year, which does not affect the general result of the comparison.

Nevertheless, it is impossible for me, after such a short stay in Rome, to give a perfectly just view of the economic condition of the kingdom. All I can hope to do is to present certain facts which may for the moment be of use to those who are interested, commercially or otherwise, in the country.

## FOREIGN COMMERCE.

The total imports of foreign products into Italy (exclusive of transit trade) in the year 1878 were \$214,126,000, being \$16,117,000 less than in the year 1877.

The total amount of Italian exports (exclusive of transit trade) for the same period was \$209,060,000, being \$13,239,000 greater than in the year 1877.

Taking the mean of imports and exports for the preceding five years (1873-1877), we find that the imports in 1878 were less than that mean by \$34,480,000, and also that the exports were less than that mean by \$6,031,000.

The value of the imports exceeded that of the exports in 1878 by \$5,066,000.

TABLE A.—Imports into Italy in 1878, compared with 1877.

Class.	Articles.	Imports.	
		1878.	1877.
I	Spirits, wines, and oil.....	\$8,968,000	\$12,483,000
II	Groceries, spices, and tobacco.....	22,144,000	27,034,000
III	Chemicals, drugs, resins, and perfumery.....	5,651,000	5,155,000
IV	Dyes and dyestuffs.....	3,759,000	4,151,000
V	Hemp, flax, jute, &c.....	7,085,000	5,608,000
VI	Cotton.....	26,571,000	31,226,000
VII	Wool and hair.....	17,616,000	17,886,000
VIII	Silk.....	21,254,000	22,210,000
IX	Wood and straw.....	7,555,000	10,988,000
X	Paper and books.....	1,229,000	1,707,000
XI	Skins and furs.....	8,120,000	8,970,000
XII	Minerals and metals.....	20,950,000	26,143,000
XIII	Stone, earthen, pottery, and glass.....	13,437,000	13,127,000
XIV	Cereals, flour, macaroni, &c.....	28,578,000	22,011,000
XV	Animals and animal products.....	15,250,000	15,398,000
XVI	Miscellaneous.....	5,959,000	6,146,000
	Total.....	214,126,000	230,243,000

TABLE B.—Exports from Italy in 1878, compared with 1877.

Class.	Articles.	Exports.	
		1878.	1877.
I	Spirits, wines, and oil.....	\$21,830,000	\$24,184,000
II	Groceries, spices, and tobacco.....	1,085,000	903,000
III	Chemicals, drugs, resins, and perfumery.....	7,103,000	7,015,000
IV	Dyes and dyestuffs.....	2,668,000	2,831,000
V	Hemp, flax, jute, &c.....	10,259,000	7,390,000
VI	Cotton.....	2,185,000	1,907,000
VII	Wool and hair.....	2,296,000	1,678,000
VIII	Silk.....	56,571,000	46,780,000
IX	Wood and straw.....	12,856,000	11,396,000
X	Paper and books.....	1,680,000	2,167,000
XI	Skins and furs.....	3,642,000	3,003,000
XII	Minerals and metals.....	13,753,000	13,622,000
XIII	Stone, earthen, pottery, and glass.....	11,005,000	9,917,000
XIV	Cereals, flour, macaroni, &c.....	24,506,000	25,232,000
XV	Animals and animal products.....	33,276,000	35,566,000
XVI	Miscellaneous.....	4,345,000	3,159,000
	Total.....	209,060,000	195,831,000

On referring to Tables A and B we see that there was in 1878 an increase of imports in Class V, hemp, flax, and jute; Class VII, wool and hair, and especially in Class XIV, cereals and flour, and vegetable products, though the importation of grain is not so great as it was in 1874. The most notable decrease is in Class I, spirits, wines, and oils; Class II, groceries, drugs, and tobacco; Class VI, cotton; Class VIII, silk; Class XII, minerals and metals; and Class XV, animal products.

The chief increase of exports in 1878 was in Class XII, minerals and metals, and Class XV, animal products.

The chief decrease of exports in 1878, was in Class I, spirits, wines, and oils; Class VIII, silk; Class XIV, cereals, flour, and vegetable products.

The exports of vegetable products in 1878 were not so little as in 1874. The average exports of vegetable products in the five years from 1873 to 1877 were \$26,655,000; the average imports of the same \$25,690,000, showing that in ordinary years Italy more than feeds her-



self. In 1878 the exports of cereals were \$24,506,000, and the imports \$28,578,000, showing a large deficiency of the harvest. Of the imports of cereals more than two-thirds consist of grain, chiefly from Russia and Turkey, which is specially adapted to the manufacture of maccaroni. The chief exports in this item were grain, rice, maccaroni, oranges, lemons, figs, almonds, and nuts.

Table C will show the amount of the commerce of Italy in 1878 with the chief countries.

TABLE C.—*Commerce of Italy with other nations in 1878.*

Countries.	1878.	
	Imports.	Exports.
England .....	\$47,416,000	\$19,357,000
France .....	54,394,000	97,355,000
Austria .....	39,312,000	34,673,000
Germany .....	7,896,000	4,169,000
Switzerland .....	6,703,000	19,785,000
Belgium .....	3,055,000	1,301,000
Holland .....	2,715,000	2,000,000
Russia .....	10,700,000	3,542,000
Spain, Gibraltar, and Portugal .....	870,000	2,814,000
United States and Canada .....	10,874,000	7,290,000
Argentine Confederation .....	2,309,000	3,973,000
Greece and Malta .....	1,127,000	2,750,000
European Turkey .....	6,989,000	2,662,000
Asiatic Turkey .....	813,000	306,000
Egypt .....	1,840,000	1,193,000
Tunis and Tripoli .....	1,418,000	599,000
English possessions in Asia .....	8,098,000	2,347,000
Other countries .....	7,597,000	2,737,000
Total .....	214,126,000	209,060,000

The directions in which the Italians are chiefly endeavoring to extend their commerce are in the East and in South America. It is for this reason that Italian statesmen are so anxious about the increase or the diminution of their influence in Egypt, Tunis, and Albania; it is for this that a commercial establishment is being made on the Bay of Assab, in Abyssinia, which has been bought by an Italian company; it is for this that exploring expeditions have been fitted out for Abyssinia and the Sudan. Lines of Italian steamers run regularly to Tunis, Constantinople, Suez, and India, as also to Pernambuco, Bahia, Rio de Janeiro, Montevideo, Santos, and Buenos Ayres. For the Italian commerce in South America, the great Italian emigration to those regions has been of immense service.

Adding some small amounts not particularly mentioned in Table C, we find that the Eastern trade of Italy in 1878, *i. e.*, with European and Asiatic Turkey, Greece, Malta, Algeria, Tunis, Egypt, India, and China, was, imports, \$20,566,000; exports, \$10,203,000. In the same way the total trade with Central and South America was, in 1878, imports, \$3,808,000; exports, \$5,556,000.

The transit trade in 1878 amounted to \$16,190,000, less by \$2,247,000 than in 1877. Of this, \$954,000 came from the United States and Canada, and \$201,500 went there.

As concerns the paths of commerce, taking the total trade of 1878, including that in transit, there entered Italy, by land, goods worth \$84,422,000; by sea, under the Italian flag, \$43,739,900; by sea, under foreign flags, \$102,154,300. There left Italy, by land, \$123,748,000; by sea, Italian flag, \$36,787,000; by sea, foreign flags, \$62,716,000.

The duties received on importations and exportations at the Italian custom-houses for the last five years have been as follows:

Years.	Imports.	Exports.
1874.....	\$16,807,760	\$1,341,538
1875.....	17,443,852	1,519,239
1876.....	16,865,400	1,572,557
1877.....	16,633,094	1,481,972
1878.....	16,489,593	1,471,988

#### COMMERCE OF ITALY WITH THE UNITED STATES.

In 1878, the chief imports from the United States and Canada (for, owing to the manner in which the custom-house returns are drawn up, it is impossible to separate the imports from Canada) were:

Spirits.....	gallons..	990,056
Petroleum and mineral oils, refined.....	pounds..	100,399,305
Other oils.....	do....	7,738,286
Coffee.....	do....	938,890
Tobacco, leaf.....	do....	19,491,077
Tobacco, cigars.....	do....	68
Sugar, refined.....	do....	47,606
Sugar, raw.....	do....	373,527
Chemicals, drugs, resins, &c.....	do....	4,566,114
Cotton, raw.....	do....	14,994,000
Cotton tissues, unbleached.....	do....	13,230
Cotton tissues, bleached.....	do....	11,466
Cotton tissues, printed.....	do....	71,662
Bitumen.....	do....	927,985
Coals.....	tons..	4,660
Wheat.....	bushels..	1,882,880
Indian corn.....	do....	13,420,160

The chief exports from Italy to the United States and Canada in 1878, according to the Italian official statistics, were:

Wine.....	gallons..	328,627
Wine.....	bottles..	49,000
Olive-oil.....	pounds..	4,817,062
Volatile oils and essences.....	do....	150,726
Candied fruit.....	do....	1,462,356
Mustard seed.....	do....	30,239
Boracic acid.....	do....	871,175
Quinine, salts of.....	do....	1,207
Carbonate of soda and potash.....	do....	26,901
Salt.....	tons..	33,460
Argols and tartar.....	pounds..	2,497,445
Non-medicinal herbs and roots.....	do....	56,010
Citron and lemon juice, raw and concentrated.....	do....	783,877
Extract of aloes, &c.....	do....	449,599
Soap.....	do....	740,880
Rags.....	do....	10,207,386
Paper.....	do....	458,640
Gloves.....	pairs..	24,200
Skins.....	pounds..	31,531
Iron ore.....	tons..	3,700
Marble, block.....	do....	15,209
Marble and alabaster slabs.....	pounds..	341,334
Marble and alabaster statuary.....	do....	111,352
Marble and alabaster manufactures.....	do....	1,741,950
Colored earths and ochers.....	do....	118,849
Non-metallic earths, lime, cement, &c.....	tons..	2,391
Sulphur.....	pounds..	129,380,800
Porcelain and earthenware.....	do....	32,193
Maccaroni.....	do....	270,774

Oranges, lemons, &c .....	pounds..	43,385,800
Carab beans .....	do.....	108,706
Almonds .....	do.....	946,606
Nuts .....	do.....	2,504,659
Dried figs .....	do.....	58,212
Various seeds .....	do.....	1,257,184
Fresh vegetables .....	do.....	363,163
Other fruit and vegetable products, dried and pickled .....	do.....	418,729
Fish in brine .....	do.....	69,457
Cheese .....	do.....	36,382
Wrought coral, unmounted .....	do.....	585
Vegetable tanning and dyestuffs, unground .....	do.....	3,024,598
Vegetable tanning and dyestuffs, ground .....	do.....	5,776,218
Raw hemp, flax, and jute .....	do.....	126,346
Cordage .....	do.....	387,639
Manufactures of hemp and flax .....	do.....	29,106
Cotton manufactures .....	do.....	46,966
Silk manufactures .....	do.....	299,439
Casks, new and old .....	capacity in gallons..	362,736
Manufactures of wood .....	pounds..	290,476
Straw braid .....	do.....	125,023
Straw hats .....	number..	643,500
Articles for museums .....	value..	\$13,935

The exports from the consular district of Rome to the United States for the years 1877, 1878, and 1879 were, in values:

Articles.	1877.	1878.	1879.
Argols .....		\$12,548 66	
Bronzes and miscellaneous works of art .....	\$13,902 58	18,562 35	\$5,344 94
Books and engravings .....	1,702 26	2,651 63	2,865 50
Cameos, mosaics, and jewelry .....	4,499 80	1,921 20	2,442 60
Maraschino liqueur .....		490 99	138 96
Paintings .....	40,497 20	33,584 40	52,214 93
Pottery and porcelain .....	3,909 56	1,414 07	1,401 37
Straw goods .....	16,222 30	9,756 58	8,936 52
Sicua earth .....	1,024 60	1,251 60	1,153 18
Statuary .....	104,245 86	115,726 70	38,230 80
Tapestry, old furniture, and frames .....	2,299 98	1,282 91	4,369 83
Wrought marble .....	12,012 89	1,708 24	6,795 33
Miscellaneous .....	7,419 03	2,605 65	2,308 43
Total .....	207,736 06	203,504 98	126,202 38

The great falling off in the exports from this district in 1879 is to be ascribed chiefly to the depression of trade in America. Fewer Americans were in Rome, and they had less money to spend. This is not a business center, and the exports consist principally of the purchases made by foreigners. In part, too, it may be caused by insufficient statistics, as American artists sometimes refuse to take out a consular certificate to the invoice of the works they send home, and content themselves with an artist's certificate.

With regard to the Italian trade with the United States, it will be noticed that nearly all the importations into Italy from the United States are of raw materials. Of late years almost no machinery, very few cigars, and a very small quantity of cotton tissues have been imported. The total importation of leaf tobacco during 1878 was 33,311,451 pounds, worth \$3,775,675. Of this more than half, viz, 19,491,097 pounds, came from the United States. The other largest imports were from the other American countries, 4,760,011 pounds; Austria, 4,130,185 pounds; Germany, 2,591,536 pounds; England, 2,158,254 pounds. The amount of foreign cigars imported was 3,010 pounds, worth \$13,690. Of this only one forty-fourth came from the United States. The remainder was imported from France, Austria, Switzerland, Germany, and England.

Apparently none were imported directly from Havana. Of manufactured tobacco of other sorts there were imported 13,489 pounds, worth \$6,129. This was chiefly from Austria, France, and Switzerland. The sale of tobacco is a government monopoly in Italy, and most of cigars smoked are made in the country. Native tobacco, which is raised in large quantities in the provinces of Lecce and Benevento, in the neighborhood of Naples, and in Sardinia, is used chiefly for fillings, while the wrappers are made of imported tobacco. The higher sorts of cigars made by the *regia* are tolerably uniform in quality, and good. Tobacco being a monopoly, the importation of tobacco and cigars by private persons is entirely forbidden. Foreign cigars can only be obtained at the government shops.

The total amount of sugar and molasses imported in 1878 was 161,825,611 pounds, worth \$11,158,443. Of refined sugar there were 56,049,997 pounds, worth \$4,457,751. Of this nearly one-sixth came from the United States; more than one-half, 29,292,878 pounds, came from Austria, and the remainder from France, Holland, England, Germany, and India. The amount of raw sugar imported was 105,440,013 pounds, of which  $\frac{3}{4}$  came from the United States. The chief imports were from Austria, 39,955,261 pounds; England, 32,923,075 pounds; and the remainder from Egypt, France, India, Russia, and Holland. The amount of molasses imported in 1878 was 335,601 pounds, of which two-thirds, or 240,124 pounds, came from France, 80,923 pounds from Austria, and the remainder from Germany, England, and Turkey. None of it came from the United States.

TABLE D.—Cotton imported into Italy in 1878.

Articles.	Germany.	Austria.	France.	England.	Turkey in Europe.
Cotton:					
Raw, in bales..... pounds.		1,697,409	3,965,031	7,086,201	3,413,019
Thread, unbleached..... do.	28,885	616,959	212,121	8,862,777	
Thread, bleached or dyed..... do.	413,217	473,413	694,354	1,246,045	
Twist of all kinds..... do.	227,556	414,981	329,206	5,447,452	
Tissues, unbleached..... do.	18,081	204,277	1,092,798	4,564,350	
Tissues, bleached..... do.	175,738	493,920	489,289	4,672,174	
Tissues, colored or dyed..... do.	369,568	455,778	841,207	1,242,075	
Tissues, printed..... do.	636,142	1,080,229	907,578	2,745,147	

Articles.	English Possessions in Asia.	Egypt.	United States.	Other countries.
Cotton:				
Raw, in bales..... pounds	26,305,873	1,129,842	15,394,000	812,322
Thread, unbleached..... do				566,023
Thread, bleached or dyed..... do				
Twist of all kinds..... do				37,705
Tissues, unbleached..... do			1,323	910,888
Tissues, bleached..... do			5,466	378,378
Tissues, colored or dyed..... do				280,135
Tissues, printed..... do			71,662	383,229

Table D will show the amount of cotton and cotton goods imported into Italy in 1878. Of this it will be seen that nearly one-half, 26,305,873 pounds, came from the English possessions in Asia; 14,994,000 pounds

came from the United States; 7,086,201 pounds came from England; 3,965,031 pounds from France; all of which was probably American cotton bought through middlemen; 3,113,019 pounds came from Turkey in Europe, and 1,129,842 pounds from Egypt. A small quantity came from China and Japan.

Other noticeable things are the large importations of petroleum, and of Indian corn and wheat. As has been before remarked, the increase in the importation of cereals is owing to the bad harvests and will not be constant.

It is believed here that if somewhat more attention was given by American manufacturers to the Italian market a considerable increase of imports from America might be expected. Frequently manufacturers take no pains to have circulars translated into Italian, but distribute them in English, and they are unread and unheeded. For many articles it is necessary to consult Italian habits and Italian tastes. This is especially the case with regard to cloths and cotton goods. Certain colors and certain patterns are preferred in Italy, and it is customary here to use goods of widths different from those generally made by the manufacturers in America. When people are accustomed, for instance, to cotton goods of a certain width, they know the exact amount which they use, and are unwilling to buy goods, though better in quality, which are either wider or narrower. English and French manufacturers take advantage of this feeling and send their agents here with patterns, and make their goods of widths, lengths, and colors to suit the market.

It is to be hoped that the recent establishment of lines of steamers running directly to ports of the United States will assist in increasing the American trade. The fruit trade from Italy has become so important that in addition to the English steamers which take fruit from Sicily and Southern Italy to America, but which usually return by the way of England, the Florio Company has now started a line of steamers which run with tolerable regularity from Naples and Palermo directly to New York and back. As this company will naturally desire to obtain a home-ward cargo, it can be made a powerful agent for increasing the imports from America.

Since the most of this report was written I have received some statistics of trade for 1879.

TABLE E.—*Foreign commerce of Italy in 1879.*

Class.	Articles.	1879.	
		Imports.	Exports.
I	Spirits, wines, and oils .....	\$10,334,000	\$36,709,000
II	Groceries, spices, and tobacco .....	26,586,000	843,000
III	Chemicals, drugs, resins, and perfumery .....	6,440,000	7,231,000
IV	Dyes and dye-stuffs .....	4,700,000	2,325,000
V	Hemp, flax, jute, &c .....	5,771,000	11,257,000
VI	Cotton .....	28,505,000	4,871,000
VII	Wool and hair .....	17,178,000	2,238,000
VIII	Silk .....	24,870,000	47,736,000
IX	Wood and straw .....	7,880,000	10,667,000
X	Paper and books .....	1,236,000	1,971,000
XI	Skins and furs .....	9,520,000	4,090,000
XII	Minerals and metals .....	21,664,000	10,890,000
XIII	Stone, earthen, pottery, and glass .....	14,458,000	14,571,000
XIV	Cereals, flour, macaroni, &c .....	49,878,000	24,185,000
XV	Animals and animal products .....	17,598,000	28,672,000
XVI	Miscellaneous .....	5,804,000	1,935,000
Total .....		252,418,000	210,183,000

Table E shows the foreign commerce of Italy, exclusive of the transit trade, for the year ending December 31, 1879. On comparing this with Tables A and B there will be noticed an increase in the value of the imports, the most notable of which were in Class II, groceries, spices, and tobacco; Class VI, cotton; Class VIII, silk; Class XIV, cereals, flour, &c., and Class XV, animals, animal products, &c. In Class II the increase is partly owing to heavy imports of sugar made during the first six months of the year in anticipation of a modification of the internal-revenue tax on sugar-refining. In estimating the importance of cotton, Class VI, as an article both of export and of import, some allowance must be made for the fact that raw cotton is exempt from either import or export duty, and in entry it is sometimes declared for home consumption when intended for transit only; therefore foreign cotton not unfrequently figures as an Italian article of export. In Class VIII imports of silk and silk manufactures increased considerably through the failure of the home crop. The advance in the value and quantity of imports of cereals, flour, &c., Class XIV, made chiefly during the last quarter of the year, is to be attributed to the short home crops, and to the consequently increased prices. Considerable imports of grain from the United States, in foreign bottoms, have recently been reported at Naples; this is altogether a new branch of commerce with the United States at that port.

In Class XV the increase was chiefly in cheese and raw wax. Early in 1879 the government prohibited the importation from the United States into the ports of Italy of hogs, hogs' meat, or any preparations made therefrom. This measure was taken in consequence of pork of American origin being found infected with *trichinæ spiralis* at Milan and Naples. Shortly after, this restriction was extended to imports of hogs, pork, and pork preparations from all foreign countries. Many of the larger towns and cities followed with local regulations providing that pork and its various preparations, of whatever origin, should be subjected to microscopic examination before entry within their respective municipal limits. In consequence of these restrictions, and of the very general fear of infection from pork and pork preparations, imports from abroad entirely ceased, while the trade and consumption in the large centers of population became extremely limited.

The total increase of imports was \$38,281,000. The chief increase of the exports in 1879 took place in Class V, \$14,879,000. Class XIII, \$3,567,000; Class X, \$2,687,000, and Class VIII, \$1,165,000. The chief decrease was in Class XV, \$4,703,000; Class XII, \$2,862,000, and Class XVI, \$2,450,000.

The total increase of exports was \$11,132,000. The amount of customs dues received on imports was in 1879 greater than in 1878 by \$5,032,000; the amount received on exports was less by \$207,000.

#### NAVIGATION.

In 1878 the total movement in all the ports of Italy, entrances and clearances, including fishing vessels engaged in the fisheries on the high seas, was 229,796, representing 28,198,095 tons. The total movement for commercial purposes was 189,154 vessels entered and cleared of 25,253,102 tons, of which 31,438 of 8,152,824 tons capacity were engaged in foreign commerce, and 157,716 of 17,100,278 tons in the coasting trade. Of these 151,756 were sailing vessels, representing 6,827,525 tons, and 37,398 steamers of 18,425,577 tons. The trips made by vessels carrying the Italian flag numbered 171,658, with a capacity of

16,340,451 tons; those of vessels sailing under foreign flags, 17,496, of 8,912,651 tons. Vessels entered and cleared with cargo numbered 147,938, representing 22,238,261 tons; vessels entered and cleared in ballast, 41,216, of 3,014,841 tons.

Comparing the total movement of navigation in 1878 with the five preceding years we have the following general results :

Years.	No. of vessels of all kinds entered and cleared.	Tonnage.
1873.....	274,490	23,972,238
1874.....	268,273	26,053,572
1875.....	266,580	27,219,297
1876.....	243,845	27,832,675
1877.....	241,296	28,032,015
1878.....	220,796	28,198,095

Among the vessels of foreign nations entered and cleared from Italian ports in 1878 England took the first rank, with 4,997,839 tons, of which 4,582,854 were steamers. France followed next with 2,003,284 tons; Germany, Austria, Holland, and Greece figured for a little over 200,000 tons each. The American, Portuguese, and Roumanian flags were represented only by sailing vessels; that of Belgium by steamers only.

During the same year the navigation in the six principal ports of Italy, comprising Genoa, Leghorn, Messina, Naples, Palermo, and Venice, which represent the chief commercial activity of the country, was 47,196 vessels entered and cleared, of a tonnage of 12,965,067, or about one-half the navigation of the entire kingdom. There was a considerable falling off, both in the number of vessels and tonnage in each of these ports in 1878 as compared with 1877, the greater of which was Venice, with 979 vessels representing 69,573 tons; Genoa, 1,619 vessels with 60,483 tons; and Leghorn, 483 vessels, of 59,901 tons. The diminution in the ports of Messina, Naples, and Palermo varied from 12,000 to 28,000 tons each.

No steamers carrying the flag of the United States entered the six principal ports of Italy in 1878. The number and tonnage of sailing vessels carrying the flag of the United States entered and cleared at these ports in 1877 and 1878 was :

*United States sailing vessels in Italian ports, 1877 and 1878.*

Foreign and coastwise.	No. of vessels.	Tonnage.
<b>GENOA.</b>		
Foreign:		
1877.....	61	31,548
1878.....	38	18,852
Coastwise:		
1877.....	20	9,260
1878.....	15	7,580
<b>LEGHORN.</b>		
Foreign:		
1877.....	16	8,751
1878.....	29	14,494
Coastwise:		
1877.....	14	6,203
1878.....	12	6,515
<b>MESSINA.</b>		
Foreign:		
1877.....	40	16,396
1878.....	22	9,406
Coastwise:		
1877.....	16	6,909
1878.....	5	1,913

*United States sailing vessels in Italian ports—Continued.*

Foreign and coastwise.	No. of vessels.	Tonnage.
<b>NAPLES.</b>		
Foreign :		
1877 .....	11	5,493
1878 .....	6	3,098
Coastwise :		
1877 .....		
1878 .....		
<b>PALERMO.</b>		
Foreign :		
1877 .....	27	12,186
1878 .....	15	7,872
Coastwise :		
1877 .....	12	5,237
1878 .....	2	1,150
<b>VENICE.</b>		
Foreign :		
1877 .....	8	3,322
1878 .....	4	1,884
Coastwise :		
1877 .....	4	1,817
1878 .....		

The state of the Italian mercantile fleet for the last five years may be seen from the following :

Years.	Steamers.		Sailing vessels.	
	No.	Tonnage.	No.	Tonnage.
1874 .....	138	52,370	8,438	966,137
1875 .....	141	57,147	10,742	1,010,130
1876 .....	142	57,881	10,903	1,020,488
1877 .....	151	58,319	10,828	987,190
1878 .....	152	63,020	10,791	978,519

The considerable diminution in the number and tonnage of sailing vessels in 1877 and 1878 was chiefly owing to a strict revision of the register ordered by the Navy Department in 1877. As a result of this revision about 650 vessels, of 20,000 tons, were struck off the register as broken up, wrecked, sold to foreigners, &c., and about 1,450 small craft, with an aggregate of 12,500 tons, were struck off as having been engaged in local trade, fishing, and port and shore service for more than two years. In 1878 200 other small craft were struck off the register by a royal decree dividing the littoral into six fishery districts, to enable boats to fish in which, a simple license is sufficient.

Vessels employed in port and shore service in 1878 numbered 10,602, and were classified as follows: 23 steam tugs, 35 steam barks, 788 pleasure boats, 156 ponton boats, 5 life boats, 1,206 boats for miscellaneous uses, 106 pilot boats, 1,160 flat boats, 2,320 lighters, 4,006 small boats for embarking and disembarking passengers, 460 ballast boats, 13 store ships, 73 cistern boats, and 25 other small craft.

In 1878 the fisheries employed 15,441 boats, with an aggregate of 52,339 tons. Of these boats 13,490, of 35,589 tons, were engaged in taking fish along the Italian littoral; 774, of 6,874 tons, in Italian seas; and 706, of 5,870 tons, in foreign waters. The coral fisheries employed 333 boats, of 3,060 tons, in Italian waters, and 138 boats, of 946 tons, in foreign waters. Up to 1877 there had been very little change in the fishing fleet for some time; in 1877 and 1878 there was a notable increase over 1876 in the



number and tonnage of the vessels engaged in taking fish. In 1878 there was also an increase in the number and tonnage of vessels employed in coral fishing.

Two hundred and twenty one vessels, aggregating 29,365 tons, were built in the ship-yards of Italy in 1878. Their declared value was \$1,680,000, of which \$949,750 represented the value of the hulks and the remainder, \$730,250, their rigging and equipment. The average value of each vessel was \$7,602; the average tonnage of each vessel was 133, but of the number built only 59 exceeded 60 tons. Eight were steamers. The year 1878 shows a falling off both from 1876 and 1877. In 1876 312 vessels were launched; total tonnage, 70,022; total value, \$4,176,537. The average tonnage and value of each vessel was 224 and \$13,386.

Two hundred and eighty-six vessels were launched in 1877; total tonnage, 39,287; total value, \$2,201,400; average tonnage of each vessel, 137; average value of each vessel, \$7,697. In fact there has been a great decrease in shipbuilding since 1869, when it had reached its highest development. In that year 683 vessels were launched, of a tonnage of 96,010 and a value of \$5,536,000. The ship-yards first in importance in 1878 were Genoa, Castellamare, and Savona.

At the close of 1878, 210,667 men were inscribed on the rolls of the twenty-three maritime districts into which Italy is divided. These men were divided into two classes: 1. 148,390 seamen proper; and, 2. 61,877 men engaged in various marine industries, such as shipbuilding, &c. The increase in both classes in 1878 was 1,243 men.

#### SHIPWRECKS.

Shipwrecks in Italian seas in 1878 numbered 89, of which 75 were Italian and 14 foreign (4 French, 3 English, 2 Ottoman, 2 Greek, 1 Austrian, 1 German, and 1 Spanish). The declared value of 83 of the vessels lost in Italian waters in 1878 amounted to \$430,000, of which \$141,450 were for 70 Italian vessels, and \$288,550 for 13 foreign vessels. Forty-four persons perished in the above-named wrecks; that is, 42 persons on Italian vessels, and two only on foreign vessels. Sixty-four Italian vessels were lost in foreign seas in 1878. The declared value of 53 of the same was \$1,216,000. The total number of lives lost was 47.

#### AGRICULTURE.

The heavy autumn and winter rains, 1878-'79, together with the long-continued drought in the spring and summer, had a most injurious effect on the general agricultural products in 1879. The crops of wheat, rye, barley, and oats were short and below average, and greatly inferior in quality to those of the preceding year. Throughout the kingdom the crop of maize was almost a failure. Crops of pease, beans, lentils, and lupins were all short, but generally good in quality. The potato crop was short and inferior in quality. On the contrary, the yield of rice, chiefly grown in the northern provinces of Novara, Pavia, Milan, and Mantua, was good both in quantity and quality. The crop of hay and clover was abundant in quantity and greatly superior to that of 1878. The product of hemp and flax was below average.

Owing to cold and unfavorable weather in April and May, 1879, which destroyed the silk worms and blighted the mulberry trees, the silk crop was far inferior to that of 1878. In 1879 the total yield of cocoons was estimated to be 41,648,307 pounds, valued at \$19,688,122. The total

product of raw silk in the same year was 2,640,000 pounds. The product of raw silk for the five preceding years was as follows:

	Pounds.
1874 .....	7, 546, 000
1875 .....	6, 760, 600
1876 .....	2, 200, 000
1877 .....	4, 076, 600
1878 .....	4, 180, 000

The culture of the vine is most important to Italy. Compared with the consumption of wine the importation is insignificant, nearly all the wine drunk being produced at home. The exportation is small and is chiefly confined to the Sicilian wines, especially Marsala and sweet Syracuse wine with a little Chianti, but is yearly increasing. The better methods of making wine recently introduced, and the exhibitions now frequently held in the chief provinces have been of great advantage in improving the quality of wine.

The total product of the vintage of 1879 was 495,544,552 gallons of wine, but, though superior in quantity to the crop of 1878, it was not equal in quality.

The prevalence of phylloxera and other diseases of the grape in France and the neighboring countries have for some time caused great alarm, as it has been felt that any serious disaster to the wine crop would be a great blow to the prosperity of the country. As a preventive measure against the phylloxera, the government has, for some time back, prohibited the importation of grape-vines, grape-cuttings, fresh fruits, flowers, plants, leaves, &c.; but, in the spring of 1879, it was found that the disease had appeared in several localities in the provinces of Como and Friuli, in Northern Italy. Strict measures for destroying and preventing the spread of the parasite were at once taken by the government.

By the law of April 3, 1879, mayors are instructed to watch over the vineyards of their respective communes, and, in case of the appearance of phylloxera, to report it at once to the government. Special agents will then be sent to inspect the vineyards, and, if found to be really infected, immediate steps will be taken for isolating such vineyards pending definite orders from the government. These measures may be: 1st. A complete isolation of the infected zone, its vines, sticks, fertilizers, and plants. 2d. Scientific remedies. 3d. The partial or entire destruction of infected vineyards, and those in the immediate vicinity.

Before destroying infected localities, appraisers appointed according to regulations will estimate the damage and loss to owners, to whom certain indemnities are allowed. Up to February, 1880, 148 vineyards, situated in 228 communes, had been inspected by the government delegates in search of phylloxera.

It being believed, from the result of certain experiments in France, that American vines were not affected by the phylloxera, it was decided to import vines from America to serve as standards, and, in 1879, the minister of agriculture and commerce ordered 2,000 pounds of grape seed direct from the United States; but, as his order was limited to seeds of *Vitis rotundifolia*, *Vitis cordifolia* or *riparia*, and *Vitis cestivalis*, only 1,000 pounds were procured, which were distributed early in 1880 to all the grape-growing societies, to many agricultural committees and private persons: application has even been made to consular officers by private persons for American vines.

## FINANCES OF ITALY.

According to the completed accounts of the treasury the revenue of the kingdom for 1878 was as follows :

Real-estate tax :	
Current year .....	\$36,585,000
Arrearages .....	147,000
Income tax :	
Current year .....	36,559,000
Arrearages .....	43,000
Grist tax .....	16,708,000
Tax on transfer of property and on business :	
General administration of domains .....	27,251,000
Tax on railway freight .....	2,743,000
Customs .....	1,696,000
Excise .....	13,770,000
Monopolies (sale of tobacco, salt, &c.) .....	34,436,000
Lottery .....	13,877,000
Public service (railways, posts, and telegraphs) .....	20,872,000
Patrimonies of the state .....	13,100,000
Miscellaneous receipts .....	1,941,000
Reimbursements .....	13,936,000
Extraordinary receipts .....	24,939,000
Ecclesiastical property (sale and rent of) .....	7,169,000
<b>Total .....</b>	<b>265,772,000</b>

The expenses for 1878 surpassed the revenue by \$23,399,000, and were apportioned as follows :

Ministry of finance .....	\$181,693,000
Ministry of grace and justice .....	5,641,000
Ministry of foreign affairs .....	1,241,000
Ministry of public instruction .....	4,703,000
Ministry of the interior .....	10,726,000
Ministry of public works .....	30,887,000
Ministry of war .....	42,581,000
Ministry of the navy .....	9,509,000
Ministry of agriculture and commerce .....	2,190,000
<b>Total .....</b>	<b>289,171,000</b>
<b>Deficit .....</b>	<b>23,399,000</b>

It may be remarked that the receipts for 1878 were less than those for 1877 by \$9,987,500, and less than the anticipated revenue by \$10,030,000. The expenses for 1878 were, however, less than those of 1877 by \$5,610,000, and less than those anticipated in addition to those authorized by special laws by \$29,629,600; nevertheless there was a deficit of \$1,715,000, as compared with a surplus of \$2,662,000 in 1877. In 1874 there was a deficit of \$20,503,700, in 1875 of \$5,618,800, and in 1876 of \$1,482,600.

The budget for 1879 anticipated a deficit of \$16,732,400.

It will be seen that the greatest expenses of the state are the service of the debt, the army and navy, and public works. It is one of the results of the recently accomplished national unity that all Italians of whatever party desire to be a strong nation and a great country. For this purpose they incur correspondingly great expenses, and insist on a large army and immense iron-clads, forgetting that nowadays the strongest nation in the end is the one that has the largest balance at its banker's. The public works, railways, roads, quays, harbors, and drainage are necessary to the development of the country. The debt is the consequence of the great expenses of the military establishment, and of spending more than the revenue. The first thing necessary for Italian prosperity is that the state should live within its means.

The Italian debt is as follows :

Description.	Interest.	
	January 1, 1878.	January 1, 1879.
I.—Consolidated ..... 5 per cent.	\$74,912,000	\$75,536,000
Consolidated ..... 3 per cent.	1,281,000	1,281,000
II.—Unregistered .....	76,193,000	76,817,000
III.—Set apart for Holy See .....	108,000	102,700
IV.—Separately inscribed, debts of Sardinia, Tuscany, Lombardy, Modena, Parma, Rome, and railway loans .....	645,000	645,000
V.—Sundry accounts .....	7,979,700	7,213,200
	11,129,000	10,917,000
Total .....	96,054,700	95,604,900

Showing an increase of the interest on the consolidated debt of \$624,000, and a diminution of the other accounts by \$983,800, being on the whole a decrease of the interest of the debt in 1878 by \$360,800. Besides the interest there are premiums to be paid on certain bonds, and provision to be made for the extinction of certain debts. The total cost of the service of the public debt, including the premium on gold bought, was in 1878 \$120,127,000, and for 1879 is estimated at \$119,428,000. But to this must be added the floating debt. On January 1, 1878, and on January 1, 1879, the floating debt was as follows:

Description.	January 1, 1878.	January 1, 1879.
Treasury bonds (interest) .....	\$9,637,905	\$11,539,629
Accounts current (interest) .....	1,700,000	1,969,000
Advances made by banks .....	4,201,278	3,760,000
Total .....	15,529,183	17,268,629

The provincial debts amounted at the end of 1873 to \$11,280,000; 1877, to \$18,014,000. Of 69 provinces, 48 were indebted in 1873, and 49 in 1877. Six of those indebted in 1873 have paid off their debts, amounting to \$192,500. Seven provinces incurred debts between 1873 and 1877 amounting to \$3,022,900.

In 1873, out of a total of 8,326 communes, 3,415 were indebted to the amount of \$109,026,000. In 1877, 8,297 communes had debts amounting to \$141,510,000. By far the greater part of this debt was contracted by urban communes, or towns of over 6,000 inhabitants.

In 1873, 253 urban communes owed \$93,439,000; in 1877, 262 owed \$123,403,500; in 1873 the urban communes owed 71.04 per cent. of the whole; in 1877 they owed 89.80 per cent. of the whole.

The towns most deeply indebted at the end of 1877 were:

Cities.	Amount of debt.	Per head.
Florence .....	\$29,904,000	\$176 33
Naples .....	21,271,000	47 34
Milan .....	12,641,000	48 43
Genoa .....	8,363,000	51 41
Rome .....	7,538,000	32 03
Leghorn .....	3,140,000	32 12
Pisa .....	2,974,000	59 06
Turin .....	2,698,000	12 61
Palermo .....	2,210,000	9 67
Bologna .....	1,835,000	16 26

These ten towns owe, therefore, \$92,574,000, or 65 per cent. of the total communal debt. In some others, such as Siena, Como, Bari, Caltanissetta, Bergamo, and Ancona, though the debt is less than \$2,000,000, the indebtedness is more than \$20 per head.

The city of Florence has become bankrupt. It has been necessary to have recourse to extraordinary measures on the part of the government. The Parliament at the last session voted a sum of nearly \$10,000,000 for the relief of the town, and an arrangement has been made by which a certain portion of the debt will be paid yearly until the total sum is so far diminished as not to be a burden to the town.

It is necessary to say that the great expenses of the municipality at Florence were chiefly incurred in consequence of that city being raised for a few years to the rank of capital, when great improvements were undertaken. By the transfer of the capital to Rome, the revenues of Florence were greatly diminished.

The city of Naples is almost in the same condition as Florence, owing in part to great and expensive public works undertaken during the administration of the Duke of San Donato, whom his opponents call the Neapolitan Tweed. The city became burdened with a great debt, and at the same time there was very little to show for the expenditure. The municipality has presented a statement to the government showing that unless aid of some kind is given to the town, it will be impossible for it to meet its engagements. The last loan issued by the city was not taken up, and was withdrawn. The municipality desires to consolidate the debt, and if possible reduce the interest upon it, and at the same time claims that the government should restore to the municipality the revenue received at the city customs (*dazio di consumo*, levied chiefly on eatables and drinkables), a portion of which was, by a law passed some years ago, taken by the government. The municipality claims that in any case the city of Naples pays to the government out of this city customs duty far more in proportion to its population than it should.

To perceive the increase of communal expenses, we need only look at the communal budgets for 1871 and 1878. In 1871 the revenue of the communes in Italy was \$16,101,000, and their expenditures \$16,074,000; in 1878 their revenue was \$17,554,000, and their expenditures \$17,574,000.

The provincial expenditures have increased in the same way. In 1871 the revenue of all the provinces in Italy was \$16,102,000, while the expenditures were \$16,074,000. In 1878 the revenue was \$17,554,000, and the expenditures were \$17,304,000.

What a burden is borne by the Italian population may be ascertained by adding together the revenue of the state, the provinces, and the communes. For the year 1878 this was \$371,000,000. This represents taxation of all kinds, including the customs duties and other indirect taxes. There being now about 28 millions of inhabitants in Italy, this makes a taxation of \$13.25 per head, man, woman, and child. Of this sum nearly one-third, \$4.28 per head, is required simply for the payment of the interest on the united debts.

#### THE CURRENCY.

In 1866 specie payments were suspended and paper money was made legal tender. There was in circulation on December 31, 1878, 940,000,000 lire (\$188,000,000), of government notes, and 646,428,848 lire (\$129,285,769) of notes issued by banks, making a total of 1,586,428,848 lire (\$317,285,769). The natural consequence of an irredeemable paper currency was to raise the comparative value of gold. The agio on gold

fluctuates according to the course of trade, rising in April and May and then again from October to December.

Mean agio during 1878.....	9.45
Maximum agio during 1878.....	11.00
Minimum agio during 1878.....	7.90

Table F will show the agio of gold on two days of each month in 1877 and 1878 in five of the chief mercantile towns of Italy—Rome, Florence, Milan, Turin, and Naples.

It will be seen from this that the agio is different in different towns, varying according to the demand, and the course of local trade with foreign countries.

Table G will show the differences with more particularity at nine towns, where there are consulates of the United States, for the month of January, 1880. In both these tables the agio is expressed in paper lire, and is that on one hundred lire in gold. If the currency were dollars the expression would be the same.

TABLE F.—*Agio on gold for 1877 and 1878.*

Date.		Rome.	Florence.	Milan.	Turin.	Naples.	Maximum.	Minimum.	Average.
1877.									
January	2.....	8.44	8.20	8.40	8.35	8.60	8.60	8.20	8.39
	16.....	8.64	9.15	.....	8.75	8.60	9.15	8.60	8.79
February	2.....	8.10	8.00	8.30	8.30	8.00	8.30	8.00	8.14
	16.....	8.40	8.30	.....	8.50	8.50	8.50	8.30	8.42
March	2.....	8.55	8.70	8.65	8.85	8.60	8.85	8.55	8.67
	16.....	8.15	8.20	8.20	8.30	8.50	8.50	8.15	8.27
April	2.....	7.89	8.15	7.95	8.10	.....	8.15	7.89	8.02
	16.....	11.90	11.80	11.10	11.50	11.50	11.90	11.10	11.56
May	2.....	12.85	12.40	12.90	13.10	13.00	13.10	12.40	12.85
	16.....	13.40	13.40	.....	13.25	13.00	13.40	13.00	13.26
June	2.....	11.15	11.15	11.50	11.50	11.30	11.50	11.15	11.32
	16.....	10.00	10.10	10.15	10.00	9.80	10.15	9.80	10.01
July	2.....	9.50	9.35	9.75	9.95	9.75	9.95	9.35	9.66
	16.....	10.20	10.25	10.25	10.50	10.10	10.50	10.10	10.26
August	2.....	9.95	.....	10.20	10.20	9.75	10.20	9.75	10.02
	16.....	9.65	9.95	.....	9.90	9.75	9.95	9.65	9.81
September	1.....	9.50	9.65	9.70	9.85	9.60	9.85	9.50	9.66
	15.....	9.50	.....	9.50	9.50	9.85	9.85	9.50	9.59
October	1.....	9.65	9.75	9.55	9.70	9.95	9.95	9.55	9.72
	15.....	.....	9.65	9.90	9.60	9.90	9.90	9.60	9.76
November	2.....	9.10	9.20	9.10	9.05	9.00	9.20	9.00	9.09
	15.....	9.55	9.70	9.80	9.75	9.30	9.80	9.30	9.62
December	1.....	9.20	9.25	9.25	9.15	9.25	9.25	9.15	9.22
	15.....	9.00	9.20	.....	9.20	9.25	9.25	9.00	9.16
1878.									
January	2.....	9.05	9.45	9.30	9.20	9.10	9.45	9.05	9.22
	16.....	9.00	9.00	.....	9.30	9.30	9.30	9.00	9.15
February	2.....	8.90	8.90	9.05	8.80	8.75	8.90	8.75	8.80
	16.....	.....	9.25	9.25	9.40	9.25	9.40	9.25	9.31
March	2.....	9.15	9.85	9.70	9.45	9.30	9.70	9.15	9.39
	16.....	9.15	9.35	9.45	9.35	9.40	9.45	9.15	9.34
April	2.....	10.00	10.45	10.70	10.20	10.60	10.70	10.00	10.39
	16.....	10.90	10.60	10.95	10.70	10.35	10.95	10.35	10.70
May	2.....	10.90	11.05	.....	11.10	10.70	11.10	10.70	10.93
	16.....	10.65	10.70	10.85	10.70	10.60	10.85	10.60	10.70
June	1.....	9.35	9.70	9.50	9.65	9.00	9.70	9.00	9.44
	15.....	8.15	8.00	8.40	8.00	8.30	8.40	8.00	8.17
July	2.....	7.95	7.95	7.90	8.20	8.30	8.30	7.90	8.06
	16.....	8.40	8.35	8.50	8.60	8.60	8.60	8.35	8.49
August	2.....	8.55	8.35	8.25	8.35	8.60	8.60	8.25	8.42
	16.....	8.80	9.00	8.95	8.90	8.60	9.00	8.60	8.85
September	2.....	8.95	9.10	9.00	9.00	9.25	9.25	8.95	9.06
	16.....	9.60	9.50	9.55	9.50	9.35	9.60	9.35	9.50
October	1.....	9.65	9.40	9.65	9.50	9.70	9.70	9.40	9.58
	15.....	10.25	10.10	10.15	10.00	10.00	10.25	10.00	10.10
November	2.....	10.60	10.55	10.55	10.60	10.60	10.60	10.55	10.58
	15.....	9.50	9.55	9.50	9.60	9.90	9.90	9.50	9.61
December	2.....	9.80	9.90	9.75	10.00	9.95	10.00	9.75	9.88
	16.....	10.05	10.30	10.10	10.15	10.10	10.30	10.05	10.14
Maximum.....		13.40	13.40	12.90	13.25	13.00			
Minimum.....		7.89	8.00	7.95	8.00	8.00			
Average.....		9.489	9.155	9.574	9.647	9.626			

TABLE G.—*Igio on gold for January, 1880.*

Date.		Milan.	Venice.	Genoa.	Leghorn.	Florence.	Rome.
1880.							
January	2	12.10	12.60	12.40	12.35	12.70	12.00
	3		12.45	12.35	12.30	12.50	12.00
	5	12.15	12.30	12.30	12.30	12.15	12.00
	7	12.25	12.30	12.25	12.30	12.25	
	8	12.40	12.50	12.30	12.30	12.20	12.10
	9	12.40	12.55	12.30	12.30	12.25	12.15
	10	12.35	12.55	12.35	12.20	12.20	12.20
	12	12.35	12.50	12.45	12.15	12.40	
	13	12.45	12.50	12.55	12.20	12.30	12.25
	14	12.45	12.50	12.60	12.25	12.50	12.40
	15	12.70	12.55	12.70	12.35	12.55	12.50
	16	12.70	12.75	12.75	12.60	12.50	12.70
	17	12.70	12.80	12.70	12.60	12.60	12.65
	19	12.70	12.85	12.80	12.70	12.60	12.75
	20	12.85	12.95	12.95	12.85	12.95	12.90
	21	12.75	12.90	12.90	12.85	13.00	12.80
	22	12.65	12.95	12.90	12.80	12.90	12.75
	23	12.70	12.90	12.85	12.70	12.90	12.70
	24	12.65	12.85	12.80	12.75	12.90	12.85
	26	12.65	12.80	12.75	12.70	12.60	12.85
	27	12.70	12.71	12.80	12.70	12.70	13.05
	28	12.60	12.75	12.70	12.70	12.65	12.75
	29	12.25	12.55	12.20	12.40	12.55	12.25
	30	12.15	12.45	12.20	12.50	12.60	12.15
	31		12.10	11.55	11.70	12.20	12.00
Maximum		12.85	12.95	12.95	12.85	13.00	12.90
Minimum		12.10	12.10	11.55	11.70	12.15	12.00
Average		12.506	12.624	12.540	12.462	12.546	12.488

Date.		Naples.	Alcalá.	Palermo.	Maximum.	Minimum.	Average.
1880.							
January	2	12.60	13.00		13.00	12.10	12.55
	3	12.50	13.00	13.15	13.15	12.00	12.53
	5	12.50	12.50	12.75	12.75	12.00	12.23
	7	12.50	12.25	12.75	12.75	12.25	12.26
	8	12.50	12.40	12.75	12.75	12.10	12.38
	9	12.50	12.50	12.75	12.75	12.15	12.41
	10	12.50	13.00	12.50	13.00	12.20	12.43
	12	12.50		12.40	12.50	12.15	12.39
	13	12.50	12.80	12.75	12.75	12.20	12.48
	14	12.50	12.75	12.75	12.75	12.25	12.52
	15	12.50	13.25	12.60	13.25	12.35	12.63
	16	12.50	13.50		13.50	12.50	12.75
	17	12.90	13.25		13.25	12.60	12.78
	19	12.90	13.75	12.50	13.75	12.60	12.84
	20	13.00	13.00	12.80	13.00	12.85	12.92
	21	13.00	13.25	12.90	13.25	12.75	12.96
	22	13.00	13.25	12.50	13.25	12.50	12.96
	23	12.80	13.00	12.85	13.00	12.70	12.81
	24	12.80	13.00	12.90	13.00	12.65	12.83
	26	12.70	13.00	12.75	13.00	12.60	12.83
	27	12.70	13.00	12.75	13.00	12.70	12.79
	28	12.70	13.00	12.90	13.00	12.60	12.73
	29	12.00	13.00	12.75	13.00	12.00	12.44
	30	12.40	12.60	12.80	12.80	12.15	12.43
	31	11.50	12.70	12.50	12.70	11.50	12.02
Maximum		13.00	13.75	13.15			
Minimum		11.50	12.25	12.40			
Average		12.580	12.947	12.729			

The statistics of railways, posts, and telegraphs show something of the amount of business done in Italy.

## RAILWAYS.

At the end of 1878 there were—

	Miles.
Railways belonging to the state.....	2,354
Railways belonging to companies managed by the state .....	598
Railways belonging to and managed by companies.....	2,234
Total .....	5,186

Of which 71 miles were opened during the year.

The gross receipts, less the *erarial* tax, for 1878 were—

On government lines .....	\$17,723,979
On private lines worked by government.....	3,011,850
On private lines.....	9,969,057
Total .....	30,704,886

Being \$41,900 greater than in 1877.

The total receipts on all the railways averaged \$5,921 per mile, \$122 less than in 1877. The receipts per mile regularly increased from 1865 to 1874, when they reached the sum of \$6,141 per mile; since that time they have constantly diminished.

The *erarial* tax consists of a tax of 13 per cent. on the product of fast freight, and 2 per cent. on that of slow freight. It amounted in 1878 to \$2,605,710, and in 1877 to \$2,618,479, showing a falling off of \$12,769.

## POSTS.

The total expenses of the post-office department in 1878 were \$4,596,153, being \$119,614 greater than in 1877. The total receipts for 1878 were \$5,223,289, being \$175,564 greater than in 1877, and giving a clear surplus over expenses of \$627,136.

The postage on letters within the kingdom is 20 centimes (\$0.386) for 15 grams; on foreign letters within the postal union, 25 centimes (\$0.4825).

	1877.	1878.
Number of post-offices.....	3,113	3,200
Letters sent.....	129,611,138	134,901,310
Postal cards.....	14,233,139	17,243,800
Publications.....	136,902,936	143,942,964
Postal orders.....	3,732,358	3,772,822
Value of insured letters.....	\$4,312,745	\$4,498,147
Value of postal orders.....	\$93,612,240	\$90,285,500

There were sold in 1878 postage-stamps to the value of \$3,855,163, being \$93,393 more than in 1877, and postal cards to the value of \$359,548, being an increase of \$59,089 over 1877. The value of stamps affixed to unpaid letters (called *segnatasse*) was in 1878 \$204,843, being \$22,667 more than in 1877.

## TELEGRAPHS.

The length of telegraph lines in Italy at the end of 1878 was 15,622 miles, the total length of wires 52,562 miles, and the length of submarine cables about 112 miles. The number of employes of all kinds was 4,698. The number of telegraphic offices was 1,391, of telegraphic apparatus 2,311, and of semaphores 31.



During 1878 there were—

Messages sent:	
Private, interior.....	4, 179, 551
Private, foreign.....	349, 065
Government.....	268, 927
Service.....	110, 991
Messages received:	
From abroad.....	369, 046
From private companies.....	179, 725
Transit.....	182, 422

The total expenses were \$1,391,551; the total receipts \$1,913,863 (of which \$1,471,480 from private telegrams), making a surplus of \$522,312. The rates for internal telegrams are one lira (\$0.193) for a message of 15 words and 10 centimes (\$0.018) for every additional word.

#### LOTTERIES AND SAVINGS-BANKS.

Something about the well being of the working classes may be learned from the statistics of lotteries and savings-banks.

The receipts from the state lotteries give a considerable revenue to the government. Drawings are held weekly at Rome, Bari, Florence, Naples, Palermo, Turin, and Venice, but betting may be made on any of these seven lotteries at any lottery office in the kingdom. The lotteries at Naples and Turin have for some reason, probably because large sums have been won in them, been the favorites of late years. During 1877 and 1878 the receipts of these two places were nearly equal to those of the other five together. The winning of any large sum gives a great increase of business not only to the lottery where it was drawn, but to all the lotteries.

	1877.	1878.
Gross income from the lotteries.....	\$13, 524, 500	\$12, 673, 625
Deducting cost of service.....	12, 495, 090	12, 638, 523
Gross winnings to be paid out.....	7, 514, 580	8, 264, 445
Deducting the tax on movables.....	8, 522, 823	7, 173, 538
Net product to the government.....	5, 972, 207	5, 464, 965

Some unusually large winnings in 1878 made the profit much less than the average, which for the last eight years has been about \$6,000,000.

For the sixteen years from 1863 to 1878 the gross receipts from the state lotteries have been \$203,440,000; the gross winnings, \$119,078,000; leaving a profit to the government of about \$84,362,000, or, putting it in another way, nearly 59 per cent. of the money received from tickets was paid back to the people as prizes. The ease with which this revenue is collected, by taking advantage of the gambling propensities natural to all mankind, has made it a favorite method of taxation. No direct tax of equal amount could be imposed without causing great discontent.

I shall not undertake to discuss here the morality of state lotteries. It has been the fashion in all books of travel or life in Italy to represent the lower classes as utterly improvident, and as wasting all their earnings in the weekly lottery ticket. We may learn something of the truth of these statements by looking at the savings-banks. At the end of 1872 there were in Italy 282 savings-banks, properly so called, besides 119 popular banks and institutions of credit which receive earn-

ings, making in all 401. In these institutions there were out 703,940 pass-books, showing an equal number of depositors, who had to their credit the sum of \$93,071,865. Of this sum \$30,554,905 had been deposited during the year; \$32,568,827 had been withdrawn.

In the same year there were 1,731 lottery offices open, which took in \$13,144,581. In the island of Sardinia there are no lottery offices. The provinces formerly comprised in the kingdom of the two Sicilies, the population of which is 36 per cent. of the whole of Italy, had 1,009 of the 1,725 lottery offices, and spent on lotteries in 1872 the sum of \$6,528,631. The number of depositors in savings-banks during this year was in these provinces 33,202, who deposited during the year \$5,561,750, withdrew \$4,252,100, leaving them with a credit at the end of the year of \$4,189,860. It should be taken into account, however, that in that year there were only 35 savings institutions in Naples and Sicily to 1,009 lottery offices. The island of Sicily was, however, much more prudent than the Neapolitan provinces of the main-land. Its population was only 2,500,000, as compared with the 7,000,000 and over of the Neapolitan provinces. Yet, with only five savings institutions, its inhabitants laid up \$2,360,950 during the year 1872, though they spent \$1,313,730 on lotteries. The Neapolitans laid up only \$2,800,825, had a credit at the end of the year of only \$1,903,722, and spent on lotteries \$5,211,300.

I have gone thus far back in order to have a basis of comparison with a more recent period. Owing to the difficulty of starting new savings-banks on a firm foundation, and to the restrictions maintained by the old ones—some of them placing the minimum of deposit at too high a figure and keeping their doors open for deposit only once or twice a week, by which, on account of the crowd, the working classes had to lose the best part of a day—the government, in 1875, resolved on establishing a system of postal savings-banks, with especial reference to those districts which had previously had few facilities. At the end of 1878, six years later than the previous statement, there were 357 savings-banks proper, 215 other institutions which received savings, and 3,194 postal savings-banks, a total of 3,766. The total number of depositors was 1,189,929, and the amount to their credit \$153,528,900, of which sum \$93,856,380 had been deposited during the year. The Neapolitans have shared in the general improvement, with 787 savings-offices in 1878 instead of 30, as in 1872; they had 73,477 depositors, with a credit of \$6,267,420 instead of the \$1,903,722. The convenience and advantage of the postal savings-banks, which allow of deposits of one franc, have been shown in the fact that during the year 1878, the third year of the institution, 243,251 deposits were made, amounting to \$2,929,778. This sum would probably not have been saved otherwise.

#### EMIGRATION.

The emigration from Italy, although now diminishing, has been so great of late years as to call for serious attention. Efforts have been made to ascertain the reasons why so many persons leave the country, to remedy this bad state of things, and, if possible, to hinder and restrict emigration without interfering with the right of free locomotion possessed by all Italian subjects.

Emigrants are divided by Italian statisticians into two kinds, permanent and temporary, the latter class consisting of persons who leave the country for a period less than a year for travel, or to seek work in the

neighboring countries. According to this classification, we have the following table:

Classes.	1871.	1876.	1877.	1878.
Permanent emigrants.....	15, 027	19, 756	21, 087	18, 535
Temporary emigrants.....	96, 384	89, 015	78, 126	77, 733
Total.....	111, 411	108, 771	99, 213	96, 268

This classification is made according to the replies given to the passport officials, but is not accurate, as the object of the inquiries is not always understood. Besides this, there is a certain amount of clandestine emigration, without passports. Adding this, so far as it is known, we find that the total number of emigrants in 1871 was 122,479, in 1872 146,265, and in 1873 151,151.

It is perhaps better to consider the emigrants according to the countries to which they go. Thus the number of emigrants to the neighboring countries, Austria-Hungary, Switzerland, France, and Germany were, in 1876, 83,321; 1877, 73,833; 1878, 69,641. These emigrants are chiefly persons who go to the neighboring countries for work on railways and other public works, and who return in the autumn.

The emigrants to Turkey, the East, Egypt, Tunis, and Algiers, who go chiefly for business, were, in 1876, 3,582; 1877, 2,684; 1878, 3,647. The emigrants to South America, whither the current of regular permanent emigration is directed, were, in 1873, 39,267; 1876, 18,169; 1877, 20,193; 1878, 18,750.

The Italian emigrants to the United States for the fiscal year ending June 30, were, in 1876, 3,015; 1877, 3,195; 1878, 4,344; 1879, 5,791.

In the emigration for 1879 to the United States there were 4,252 males (of whom 575 were boys under 15 years of age) and 1,544 females. In these 5,791 emigrants in 1879 there were, from towns, 1,471, of whom 919 had some profession or trade, and from the rural population 4,320, of whom 2,700 had a trade or profession. Those without a trade or profession were chiefly women and children.

Of the permanent emigration to all countries in 1878, 55 per cent. of the males above 14 years of age were agriculturists, 9 per cent. day laborers, 5 per cent. masons, and 16 per cent. artisans and mechanics.

EUGENE SCHUYLER.

UNITED STATES CONSULATE-GENERAL,  
Rome, February 28, 1880.

## FLORENCE.

*Report, by Consul Crosby, on the commerce and agriculture of the district of Florence, for the year 1879.*

In compliance with the provisions of paragraph 380, Consular Regulations, I have now the honor to submit the annual report of my district.

### AGRICULTURE.

*Olive.*—From the present condition of the olive trees there will be about two-thirds of the quantity gathered last year.

*Chestnuts*.—Owing to the drought the crop will be 25 per cent. less than for 1878.

*Silk-worm eggs*.—It will be seen by the annexed statement that the silk crop is far inferior to the one of last year, and is the smallest since 1874. The Japanese silk-worm eggs have not been a success, and their cultivation has been abandoned.

*Grapes*.—Although no disease has appeared within this consular district, the vines have suffered from the drought, and the recent rains came too late to be of service. The price of wine has risen 25 per cent. over that of last year.

*Phylloxera*.—The entomological station of Florence has been called upon to examine into the recent attack by the dreaded phylloxera, which, unhappily, has appeared in Lombardy, and two of the directors have made an inspection of the territory visited by it, viz, Valmadrera and Lecco, near Como. The farm Cabianca (white house) in the former district was quite famous for the production of fine grapes without the use of sulphur. But last summer these vines were attacked, and, after examination, it was discovered that thousands of insects (*afidi*) had covered the roots of the vines, which proved to be the same insect as the French phylloxera. The sulphur of carbonium was used with success as an antidote, and all the vines attacked were destroyed by fire. At Bergamo, Brescia, and Mantua some apprehension also was felt, but, with the exception of the above-mentioned localities, no further progress of the phylloxera has been noticed. Some roots that had been attacked were sent from those places to the agrarian station at Florence for examination, but finally, fearing the consequence of such transportation through a vine-growing country, it has been stopped, and the disease confined to the above locality. The free cultivation of tobacco has been suggested as one of the means by which phylloxera can be eradicated.

Owing to a very rainy and cold spring, and late in the summer a severe drought, the general average for all crops throughout this district is 35 per cent. less than for the year 1878.

#### FORESTS AND TREES.

The Italian Government is urging upon all landed proprietors the necessity of setting out young trees, and for that purpose the Agricultural College at the Vallombrosa, 15 miles from Florence, has been most energetic in the distribution of plants, shrubs, and trees free of expense throughout Tuscany. A premium has also been offered by the government to the agriculturalist who has been most successful in this direction during the past year.

#### COMMERCE.

The chamber of commerce at Florence does not publish any report this year to enable me to obtain any statistical data. No records are kept of commercial transactions. Business depression still continues. Imports for Florence are entered at Leghorn. The exports, as near as I can judge from very meager data, amount to about 30,000,000 lire, estimating straw goods at 12,000,000; silk, 5,000,000; timber, 4,000,000, and the balance for works of art, wine, oil, &c. The exports to the United States for the calendar year 1878 show an increase of \$65,505.36.

The nomenclature of exports from Florence to America has not varied for many years from straw goods and works of art, but this year a trade in oil, hemp, china and earthen ware has taken place. The ancient

firm of Ginori have a large porcelain manufactory at Doccia, near Florence, are establishing a trade with the United States, and also the firm of Cantayalli are engaged in the manufacture of majolica and terra-cotta in imitation of the antique, and they are making great progress in the reproduction of this ware, which, in ancient times, was the source of much wealth to this country.

#### REVENUES.

*Octroi.*—I reported last year that, owing to an indebtedness of about 1,800,000 Italian lire by the municipality to the government, the latter had assumed the administration for the collection of octroi taxes since July 11, 1878. A more careful and economical management of this branch of the service since then has caused a large increase in the revenues.

Months.	Years.		Increase.
	1878.	1879.	
	<i>Lira.</i>	<i>Lira.</i>	<i>Lira.</i>
January.....	538,538.79	622,166.51	83,627.72
February.....	475,090.13	523,552.56	48,462.43
March.....	507,010.35	576,397.88	69,387.53
April.....	517,585.71	555,910.67	38,324.06
May.....	523,026.56	586,258.11	63,231.55
June.....	440,340.73	483,035.99	42,695.26
July.....	468,036.73	483,584.87	15,548.14
August.....	434,219.15	440,908.07	6,688.92
Total.....	3,903,843.15	4,271,814.66	367,971.51

The increase is especially due to the consumption of liquors and wines.

#### MISCELLANEOUS.

*Financial condition of Florence.*—The law passed June 26, 1879, by the Italian Parliament gave 49,000,000 lire to the city, in Italian 5 per cent. bonds, at the rate of 83 per cent., providing that out of such appropriation there should be deducted the amount necessary for the payment of the city debt, guaranteed by the government, and the balance to be deposited with the bureau of deposits and loans in conformity with the decision of a special committee approved of by the government. The committee appointed by the government, after three months labor, ascertained what the liabilities of the municipality were—155,254,801.04 Italian lire—and came to the conclusion that in order to liquidate all the debts in a period of forty years, the city should pay 2,600,000 lire annually. The city council, after careful examination, found that the surplus revenue of the city would but amount to 1,078,000 lire, leaving an annual deficit of 1,522,000 lire. At the present time there is a dead lock existing between the city council and the finance committee appointed by the government, and no decision has yet been reached as to what can be done to make up the annual deficit. For already the city is overthrown to such a degree that almost all property-holders are complaining loudly of the burdens they have to bear, the average rate of taxation being 90 lire to each man, woman, and child.

*Railways.*—Florence is the point of conjunction between the Northern Italy and Roman Railways; the latter and the Meridionali Railway have their general bureau of direction established in this city. The

Italian Parliament has passed a bill authorizing the construction of a new line of rail running from Juenza to Pontassieve, a small, old town seven miles distant from Florence, which will pass around this city, and consequently divert part of the trade of Florence into other channels.

*Exhibitions.*—In the month of May next the Royal Horticultural Society here will have an exhibition of Italian flowers, which promises, from the present list of varieties entered, to be very important and interesting. It was intended to have an exhibition of objects of ancient art at the Royal Pitti Palace this winter, but owing to want of funds it has been given up for the present.

*Statement of population.*

Years.	Population on December 31.			Births.			Deaths.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1877 .....	86,369	89,424	175,793	2,626	2,614	5,240	2,838	2,735	5,573
1878 .....	85,791	88,939	174,730	2,504	2,491	4,995	2,965	2,882	5,827
Increase .....							107	147	254
Decrease .....	578	485	1,063	122	123	245			

The foregoing statement of the population of Florence shows a decrease of 1,063 inhabitants for the year 1878, and there will be a further decrease of about 4,000 people owing to the removal to Rome of the offices connected with the general direction of the debito pubblico of Italy.

GENERAL REMARKS.

It will be noticed that in my report on the subject of steel rails\* I referred to the fact that Germany was pushing England out of the market here in Italy. I have since learned that the Germans have not only succeeded in underselling the English in rails, locomotives, and Sheffield ware, but are also successful competitors in other manufactured articles which have hitherto been supplied entirely from England.

English and German agents are to be found at every important point in Italy, and are generally men of education and enterprise, speaking Italian and French fluently, and for smaller articles of trade having samples of their goods to show to the purchaser, whereas the few American agents who have, to my knowledge, reached Italy, not a single one could speak Italian, and only one even understands French. We can hardly expect to compete successfully in old and established lines of goods under these conditions, and, as I suggested in my report of last year, merchants and manufacturers may flood this country with circulars and advertisements printed in English, but unless they send out samples of their goods (when it can be done), and intelligent and capable agents to represent them, they cannot succeed.

J. SCHUYLER CROSBY.

UNITED STATES CONSULATE,  
*Florence.*

\* This report will be found in the "Supplemental Volume."

Statement showing the value of declared exports from the consular district of Florence to the United States during the year ending September 30, 1879.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Straw goods.....	\$267, 128 33	\$250, 009 66	\$178, 571 80	\$194, 325 20	\$690, 634 99
Pictures.....	5, 957 04	27, 867 46	24, 766 55	6, 955 45	75, 486 50
Marble statuary.....	3, 375 38	4, 591 28	24, 458 60	18, 865 90	51, 291 16
Alabaster.....	322 31	.....	598 40	246 20	1, 161 91
Mosaics.....	917 91	239 22	2, 198 20	786 20	4, 136 63
Wine.....	578 28	572 15	467 29	100 00	1, 712 72
Oil.....	.....	.....	.....	432 40	432 40
Hemp.....	.....	.....	7, 357 70	4, 994 84	12, 352 54
Books.....	227 93	.....	.....	.....	227 93
Earthenware.....	.....	.....	3, 356 50	1, 689 20	5, 039 70
Furniture.....	.....	.....	3, 377 25	779 80	4, 157 05
Miscellaneous.....	138 19	1, 513 12	1, 932 85	630 00	4, 214 16
Total in United States gold.....	278, 640 47	291, 392 89	257, 009 14	229, 805 19	1, 056, 847 69
Total for preceding year.....	360, 696 13	419, 689 47	160, 670 80	181, 566 50	1, 122, 622 90
Increase.....	.....	.....	96, 338 34	48, 238 69	.....
Decrease.....	82, 055 66	128, 296 58	.....	.....	65, 775 21

Florentine market in cocoons for the year 1879 as compared with 1878.

Kind of co- coons.	SUPERIOR QUALITY.				COMMON QUALITY.				INFERIOR QUALITY.				Total quantity sold.
	Quantity.	Average price.		Quantity.	Average price.		Quantity.	Average price.					
		Maximum.	Minimum.		Maximum.	Minimum.		Maximum.	Minimum.				
Italian:	Kilograms.	Lire.	Lire.	Kilograms.	Lire.	Lire.	Kilograms.	Lire.	Lire.	Kilograms.			
1878 .....	14, 145. 460	4. 84	4. 45	3, 945. 320	4. 38	3. 76	109, 408. 000	3. 50	3. 00	18, 340. 200			
1879 .....	7, 859. 030	6. 33	5. 71	735. 370	5. 61	4. 70	54, 220. 000	4. 40	3. 45	8, 647. 380			
Japanese:													
1878 .....													
1879 .....													
Increase .....		1. 49	1. 26		1. 23	0. 94		0. 90	0. 45				
Decrease .....	6, 286. 430			3, 209. 950			55, 188. 000			9, 662. 880			

## GENOA.

Report, by Consul Hazelton, on the trade and commerce of Genoa for the years 1878 and 1879.

From the inclosed tabular statements, marked A and B, taken from the annual reports of the chamber of commerce, it will be seen that the total commerce of the city of Genoa for the year 1878 was \$72,231,979, being an increase of \$2,004,176 over that of the year 1877, as appears from the following table, viz :

Imports, 1877.....	\$55, 219, 741
Imports, 1878.....	51, 931, 731
Decrease.....	3, 288, 010
Exports, 1877.....	10, 960, 677
Exports, 1878.....	14, 105, 624
Increase.....	3, 144, 953
In transit.....	6, 194, 621

Thus showing that Genoa exported more and imported less in the year 1878 than in 1877.

#### TRADE WITH THE UNITED STATES.

*Imports.*—The following statement shows the imports from the United States to Genoa in the year 1878:

Raw cotton, about .....	\$2, 123, 000
Raw tobacco .....	1, 300, 000
Refined petroleum .....	1, 040, 210
Sundry articles .....	35, 000
Total .....	4, 498, 210

In cotton, tobacco, and petroleum all is being done, in my opinion, that can be done at this place to keep up the trade.

There are not far from forty dealers in these goods in Genoa, many of them old and well established houses, understanding the laws of trade and averse to speculation.

*Exports.*—The exports from Genoa to the United States through this consulate during the year ending September 30, 1879, amounted to \$177,920.36, against exports for the preceding year of \$116,270.67, showing an increase of \$61,649.69 in 1879 over the preceding year. (See tabular statement marked D.)

*American cotton goods.*—I think that American cotton fabrics could be sold here, provided the goods were manufactured to suit the Italian taste, which is peculiar. The best way to test this matter would be for American manufacturers to send agents here with samples of American goods, and in this way, or some other similar way, ascertain the quality, width, and general requirements of cotton goods in the Italian market.

England and France are doing the greater part of this trade at the present time with this consular district. Each of these countries is also represented here by several mercantile houses, and has a colony which is large and respectable.

*American sewing-machines.*—The sale of American sewing-machines is quite extensive and continues unabated. As a rule, however, labor-saving machinery has no demand here, the popular idea being that such machinery takes so much labor from the workingman, hence lessens the demand for labor and lowers the price.

*American anthracite coal.*—In April, 1878, two cargoes of anthracite coal were landed at Genoa, amounting in all to 1,500 tons. Of this, 1,000 tons now remain unsold. Three hundred tons were sold and delivered on board the United States squadron while here in the spring of 1879, and of the balance 150 tons were transferred to Milan, leaving the sales here much smaller than I had hoped for.

So far as I can learn, there has been no earnest endeavor made in this consular district to introduce anthracite coal among foundry men, manufacturers, railroad men, or the class of people generally who might be expected to use it if satisfied that it was for their interest to do so. It is not adapted to family use in this locality, because it generates more heat than is required by the people in warming their dwellings, and is not controlled for cooking purposes as easily as charcoal and wood (no stoves being used).

For the purpose of smelting and propelling steam machinery of all kinds it is undoubtedly the best fuel in use, and when this fact is made plain to these people they will begin to adopt it, but will move slowly, because it is their nature to do so, and for other reasons.



In the first place, the coal and coke from France and England have long been used in Genoa for all the purposes aforesaid. Secondly, all grates and places for heating are now adapted to their use, and would have to be materially changed to burn the anthracite. Before business men make these changes they must be satisfied that it will be for their interest to do so; that when the changes are made the supply of coal will always meet the demand; that the price thereof will be reasonably uniform and not a matter of caprice.

The coke and coal countries to which I have referred are represented here by reliable men, who are personally interested in maintaining their monopoly, and will control this market so long as they are able. The present retail price of English coal and coke in Genoa is \$5 per ton, delivered to any part of the city. Good wood, fitted for use, is worth \$10 per cord, delivered as above.

In my judgment, it will require time and labor to establish the sale of American anthracite coal in this market. I think it may be done, however, if the effort is earnestly made and continued until its qualities are known and appreciated as in the United States, and that when once known and established here, it will remain one of our staple articles of export.

#### NAVIGATION.

The whole number of vessels which entered and cleared at this port in the year 1878 was 11,065, of which number 27 were from the United States, carrying 13,972 tons. In 1877 the whole number of vessels which entered and cleared at this port was 12,538, of which number 42 were from the United States, carrying 19,748 tons.

This shows a decline of about one-third in one year in the amount carried by American vessels. There are several causes which have tended to produce this result, some of which I will name.

During the last five years 312 sea-going vessels have been built in this consular district, carrying 169,660 tons (see tabular statement marked E.)

Italy is entitled to much credit for the energy manifested by her people in prosecuting this industry during the time included in the statement. It is declining, however, the supply having about reached the demand.

Most of these ships have been put in commission and are now engaged in carrying merchandise between Italy and the United States. These vessels are manned and officered at much less cost than our merchant vessels can be.

Another cause of this decline is the fact that Genoa furnishes no return freights to American vessels. In the great majority of cases our merchant vessels leave the port in ballast. The lack of suitable facilities for landing freight at Genoa furnishes still another cause. Masters of American merchant vessels often become disgusted at the treatment they receive in this regard from consignees and from custom-house officials. Their freight must first be discharged into lighters, and then taken to the place of landing. This often leads to controversy between the parties when the time for settlement comes, the master feeling that the consignee should pay the lighterage, or at least half thereof. He pleads in vain, however, and has only his labor for his pains.

In the payment of freight, also, consignees, knowing that the master is anxious to be paid the amount due him so that he may go about his business, frequently tantalize and provoke him by offering bills of exchange of doubtful value, or threaten to pay with American gold, which

the master dislikes to receive, because it is cumbersome and transported with a risk which he does not like to undertake, and which he is compelled to dispose of at some bank in Genoa, often at a loss. The result is hard feeling, and often a resolution by the master that he will avoid Genoa in the future if possible.

I am happy to say that the prospects in these respects are brightening, and that ere long Genoa will invite rather than repel commerce from her harbor.

#### IMPROVEMENTS IN SAVONA.

The commercial activity and enterprise of the city of Savona, situated about twenty miles southwesterly from Genoa, at the southern terminus of the new railroad running to Brá and thence to Turin, has been seriously felt in Genoa.

The harbor at Savona, though small, is fine, and is provided with wharves, piers, and warehouses, so that ordinary merchant vessels can move close to the place of landing and discharge their cargoes without the expense of lighterage and with but little annoyance from brokers and pilots. This has had the effect of a stimulant upon Genoa, and several new and fine piers are now being constructed on the west side of the port to facilitate the landing of freight. This work will be continued, I am informed, as projected several years ago, and new wharves and docks be constructed, and new warehouses be erected, so that freight may not only be easily landed, but passengers arriving and departing by steamer may be able to go on shore and on board without being compelled to pay tribute to boatmen and bundle-carriers of every description.

There is no lack of means to accomplish this most needed work. Several years ago the Duke of Galliera gave Genoa 20,000,000 francs, to be expended in improving her harbor, to which, I understand, the state added a like amount. This work is now progressing finely, and I trust will be continued until completed—a period of about ten years.

Several buildings are being erected and others refitted for public use. The ancient palace Spinola, situated in Via All'Aquasola, was built in 1504, by Antonio Doria, a Geneose nobleman. For many years it has been the residence of noblemen, and has been furnished with all the elegance and show of ancient time. It contains a fine gallery of paintings, and many works of art worthy of notice. This building has been purchased by the city of Genoa, and is being reconstructed into a "city hall." A fine hospital is also being erected in Genoa by the estimable Duchess of Galliera, widow of the nobleman to whom I have referred.

#### HARVESTS OF 1879.

This year the harvests in this consular district, and in Italy generally, have been discouraging. The spring rains nearly ruined the cereals, which is already being felt by the people in the increased price of bread.

The grape crop also has been a failure, although the quality is good. The ripened fruit has to some extent been damaged by the phylloxera. This is greatly to be deplored. In a country where the price of labor is so small that the greatest industry and economy are both required to supply the necessaries of life, a failure in its crops has a tendency to disintegrate society, to make men desperate, and often ungovernable. I trust, however, that some way will be provided for the laboring classes here, and feel that the public works to which I have referred will afford a living to many.

## THE GENOA EXHIBITION.

And here I will refer briefly to the "fair" or "exhibition" of the products and manufactures of the province of Genoa, held in this city late in July, 1879, on the grounds of the palace Doria, near the port. There were fine samples of canned and dried fruit; fish of various kinds preserved in oil; wines of various brands, prepared for export by the mercantile houses of the city.

The entire method of producing silk, from the silk-worm feeding on the mulberry leaf to the cocoon was also shown, and was very interesting. The display of flowers was elegant. The exhibition of stock and machinery was very creditable, but not of a high order. The cows were exceedingly small. The horses lacked size and grace.

There was a machine for making wine, which was examined with much interest. It was simply constructed, with rollers for the grapes to pass between, expressing the juice in a cleanly manner. I trust that time will bring this machine into general use.

On the last day of the exhibition, which was August 1, the King and Queen of Italy arrived in Genoa and assisted in the distribution of prizes. Their presence added much to the interest of the occasion, and during their stay, which was three days, the people of Genoa greeted them with an enthusiasm and warmth of feeling that I have never seen excelled. Every night the port, the streets, and the forts on the highlands about the city were magnificently illumined, turning night into day.

## WHEAT FROM THE UNITED STATES.

The failure in the Italian harvests is bringing wheat to this port from the Black Sea, and it soon must reach here from the United States. Several dealers have informed me of contracts made by them with parties from New York for wheat, to be delivered here. One firm has ordered twenty cargoes, of my own knowledge.

The men from the United States who had the wheat to sell came here, I am glad to say, and saw their customers. The result is an acquaintance which cannot fail to be of mutual advantage hereafter.

This method, as I said before, will be found most efficacious in introducing American goods into this market. Dealers here want to see the goods they are requested to buy, and it is better for the seller to gratify this wish by placing his goods, or samples thereof, before them.

## DUTIES ON SUGAR.

The government duties on sugar are stated as follows, viz:

In 1878, on refined sugar, 28.85 francs, about 29 francs per 100 kilograms; on raw sugar, 20.80 francs, about 21 francs per 100 kilograms; in 1879, on refined sugar, 66.25 francs per 100 kilograms; in 1879, on raw sugar, 53 francs per 100 kilograms, being an increase of over 100 per cent. on this staple, which is seriously felt by all.

These, I think, are the principal points relating to commerce in this consular district during the year ending September 30, 1879.

J. F. HAZELTON.

UNITED STATES CONSULATE,  
*Genoa, September 30, 1879.*

*Statement showing the commerce at Genoa, Italy, for the year ending December 31, 1878.*

## IMPORTS.

Articles.	Quantity.	Value entered.	Whence imported.
Mineral waters.....kilos.	219,910	\$27,014	South America, East and West Indies, England, United States, Germany, Russia, Spain, Greece, Turkey.
Wines and liquors.....		77,974	Do.
Olive-oil.....kilos.	116,626	20,472	Do.
Palm-oil.....do.	5,385,281	897,364	Do.
Volatile oil.....do.	1,661,236	375,079	Do.
Coffee.....do.	4,625,169	1,581,783	Do.
Tea.....do.	3,458	3,000	Do.
Sugar.....do.	39,288,634	5,148,978	Do.
Colonial products.....do.	1,687,642	435,189	Do.
Gums and resins.....do.	3,277,682	414,723	Do.
Medicines.....do.	19,501	93,098	Do.
Chemicals.....do.	14,067,162	1,573,715	Do.
Paints, dyes, &c.....do.	4,438,033	1,478,619	Do.
Fruits, green and dried.....do.	3,325,216	115,529	Holland, Switzerland, France, Russia, United States, England, East India, Norway, Barbary States.
Butter, cheese, and fats.....do.	4,306,976	914,374	Do.
Fish, fresh and salt.....do.	10,783,931	765,261	Do.
Meats, game, and poultry.....do.	83,939	24,182	Do.
Beef and pork, salt.....do.	1,565,624	611,784	Do.
Flour.....do.	1,428,106	49,453	Do.
Wheat.....do.	1,429,116	6,489,417	Do.
Rice.....do.	1,607,219	103,642	Do.
Other cereals.....do.	2,238,464	197,887	Do.
Cattle.....number	174	67,988	Do.
Hides, furs, and skins.....kilos.	5,351,031	1,847,798	South America, France, East India, England.
Hemp and flax.....do.	603,321	833,948	Russia, England, Austria, Egypt, Holland, France.
Manufactures of.....do.	231,600	125,673	Do.
Cotton:			
Raw.....do.	17,007,186	6,352,602	United States, South America, East India, Egypt.
Manufactures of.....do.	2,597,522	2,567,939	Do.
Wool.....do.	3,443,055	2,541,328	South America, East India, Germany, France, England.
Manufactures of.....do.	3,758,629	796,951	Do.
Silk:			
Crude.....do.	444,801	2,193,745	East India, France, Egypt.
Manufactures of.....do.	49,979	483,553	Do.
Lumber, furniture, &c.....		276,454	Sweden, Austria, United States.
Hardware and fire-arms.....		376,870	England, France, Germany, Austria, United States, Spain, Belgium.
Machinery.....		672,561	Do.
Books and stationery.....kilos.	397,885	76,310	Do.
Coral.....do.	6,385	172,686	Do.
Clocks and watches.....		6,511	Do.
Musical instruments.....		71,469	Do.
Iron:			
Pig.....kilos.	28,973,636	1,177,259	Do.
Manufactured.....do.	22,486,736	2,603,219	Do.
Copper.....do.	942,946	292,592	Do.
Lead.....do.	286,892	25,727	Do.
Tin.....do.	203,383	109,039	Do.
Zinc.....do.	619,945	54,165	Do.
Other metals.....do.	198,710	616,516	Do.
Jewelry.....		45,895	Do.
Stone, clays, &c.....kilos.	3,546,741	247,131	Do.
Marble.....		1,274	
Coal.....kilos.	408,560	2,422,534	England, France.
Petroleum.....do.	17,183,726	1,040,121	United States.
Glassware.....		155,713	France, Austria, England, Germany.
Bitumen.....kilos.	10,829,419	195,454	Do.
Sulphur.....do.	59,876	2,539	Do.
Tobacco:			
Leaf.....do.	7,908,742	1,709,834	United States, East India, Turkey.
Manufactured.....do.	275	1,118	Do.
Sundry articles.....		363,680	France, England, Germany, Austria, Barbary States, &c.
Total.....		51,923,731	

*Statement showing the commerce at Genoa, Italy, &c.—Continued.*

## EXPORTS.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Books and stationery .... kilos.	329, 908	\$62, 500	France, Spain, England, Turkey, South America, United States, Greece.
Butter, cheese, and fats ..do...	5, 577, 390	955, 458	Do.
Cattle ..... number.	104	8, 481	Do.
Chemicals and medicines kilos.	1, 841, 742	614, 732	Do.
Clocks and watches number...	1, 348	20, 604	Do.
Colonial products ..... kilos.	324, 553	111, 583	Do.
Copper, iron, and steel ..do...	3, 019, 572	35, 584	Do.
Coral .....do...	22, 405	3, 130, 858	France, England, Germany, South America.
Cotton:			
Raw .....do...	435, 576	573, 575	France, Spain, England, Russia, Greece, South America, Germany, Austria, England, United States.
Manufactures of .....do...	502, 774	155, 235	Do.
Dyes, paints, &c .....do...	4, 766, 883	1, 505, 562	Do.
Earthenware and porcelain do...	208, 060	49, 474	Do.
Fish .....do...	106, 521	24, 369	Do.
Fruits, fresh and dried ..do...	5, 157, 397	243, 254	Do.
Flour .....do...	675, 729	44, 749	Do.
Hides and furs .....do...	1, 474, 162	245, 694	Do.
Manufactures of .....do...	20, 902	30, 449	Do.
Hemp and flax .....do...	1, 277, 118	358, 202	Do.
Manufactures of .....do...	261, 003	227, 560	Do.
Jewelry .....do...		19, 324	Do.
Macaroni ..... kilos	2, 483, 410	280, 099	Do.
Machinery .....do...	82, 851	20, 698	Do.
Marble:			
In blocks .....do...	177, 071	3, 506	United States, South America, England.
Manufactures of .....do...	1, 572, 262	186, 388	Do.
Musical instruments .....do...		51, 006	France, England, United States, South America, Germany, Turkey, Egypt, Austria, Spain.
Olive-oil ..... kilos.	2, 179, 085	526, 319	Do.
Other cereals .....do...	9, 426, 394	108, 239	Do.
Other metals .....do...	224, 429	36, 799	Do.
Paper .....do...	2, 798, 051	413, 739	Do.
Rags .....do...	417, 564	22, 168	Do.
Rice .....do...	32, 878, 847	1, 827, 389	Do.
Silk:			
Crude .....do...	86, 147	256, 558	Do.
Manufactures of .....do...	110, 989	582, 739	Do.
Soap .....do...	799, 807	52, 043	Do.
Stone, clays, &c .....do...	6, 387, 136	272, 564	Do.
Volatile oil .....do...	663, 868	131, 565	Do.
Velvet .....do...	1, 791	65, 670	Do.
Wine and liquors .....do...		425, 490	Do.
Wool ..... kilos	47, 963	34, 802	Do.
Manufactures of .....do...	72, 085	186, 478	Do.
Miscellaneous .....do...		124, 121	Do.
Total .....do...		14, 105, 627	

*Statement showing the declared exports from the consular district of Genoa to the United States during the four quarters of the year ending September 30, 1879.*

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Almonds	\$354 32				\$354 32
Alabaster	98 33				98 33
Asbestos		\$98 00			98 00
Barrels, empty petroleum	444 16	237 21	\$509 00	\$232 00	1,423 37
Books	1,448 88	238 30		180 00	2,838 98
Cheese	162 08	316 21	1,017 65	56 00	2,838 98
Chestnuts					162 08
Chestnut-wood extract		1,418 41			1,418 41
Cotton goods	1,613 85				1,613 85
Corks			277 07	75 20	352 27
Filigree	3,320 61	1,487 27	1,581 32	1,081 92	7,421 12
Fernet branca		81 35			81 35
Fruit:					
Candied	4,323 00	872 20	5,428 91	9,518 00	20,143 00
Dried	514 44				514 44
Hides, dry				35,882 61	35,882 61
Lemons			581 16		581 16
Macaroni	8,000 12	4,835 31	4,896 74	7,833 15	25,565 32
Machinery	114 44				114 44
Magnesite ore				811 00	811 00
Meats, preserved	1,148 73			132 70	1,276 41
Mushrooms	1,358 31	474 11	108 43	238 70	2,174 55
Oil:					
Olive	3,621 31	3,873 26	7,041 02	2,778 22	16,913 81
Sesame	711 21	74 00		1,904 50	2,689 71
Paper	304 40		218 84		523 24
Pagliano sirup		66 10			66 10
Photographs			89 12		89 12
Pipes		76 16			76 16
Pork, salted		628 79	302 04		930 83
Rags	4,803 83	5,281 78	7,976 14		18,041 75
Rice	3,765 11				3,765 11
Soap	1,011 91	945 32	51. 62	345 66	2,822 51
Saffron	93 05				93 05
Silk	125 21				125 21
Talc	1,624 24	4,716 71	1,616 21	438 00	8,390 16
Velvet		135 34		85C 74	1,086 08
Vermouth			919 20	582 88	1,501 58
Wine	5,075 56	1,023 00	2,676 66	5,870 27	14,645 54
Miscellaneous	438 56	750 00	238 11	1,346 51	2,773 18
Total	44,470 84	27,653 83	35,942 24	60,853 45	177,920 36
Preceding year	38,762 00	24,617 01	24,891 59	28,000 07	116,270 67
Increase	5,708 84	3,036 82	11,050 65	41,853 38	61,649 69

### Ship-building.

Wharves.	1878.		1877.		1876.		1875.		1874.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Sestri Ponente	17	7,851	18	10,812	22	12,524	30	20,929	34	23,998
Savona	4	2,500	6	4,000	8	5,253	12	7,772	14	7,110
Varazze					13	8,108	13	9,434	19	11,696
Pia	4	684	3	2,388	4	2,837	7	5,016	3	1,872
Voltri			2	1,366	1	772	4	2,284	4	2,385
Santa Margherita	3	17			4	941	4	14	9	297
Sampierdarena					1	755	4	1,193	2	971
Foco			1	1,033	2	915	2	31		
Camogli	5	39							1	10
Ehrenzano	1	682			2	674	1	140	1	352
Spotorno					1	896	1	934	1	784
Recco	1	5	1	40	2	1,616	4	3,137	2	1,428
Rapallo	3	6	3	469	1	97	5	183	1	438
Pegli	1	32								
Total	39	11,816	34	20,108	61	35,378	87	51,067	91	51,291

## LEGHORN.

*Report, by Consul Masi, on the trade and commerce of Leghorn, for the year ending September 30, 1879.*

In accordance with consular regulations, I have the honor to transmit to the Department my report on the trade and commerce of the Port of Leghorn for the year ending September 30, 1879, embodied in six tabular statements, marked A to F, inclusive.

## IMPORTS AND EXPORTS.

Tables A and B show the general imports and exports of this port from and to all countries, the former amounting to \$12,225,399.88, with duties \$1,248,988.30, and the latter to \$10,667,570.09, with duties \$101,167.13, giving a decrease on imports of \$2,175,569.18, and on exports of \$79,199.50, compared with those of the preceding year.

Tables C and D are the statements of the imports and exports between the United States and Leghorn. The imports were \$1,106,864.80, against \$988,039.25 in 1878, thus giving an increase of \$118,825.55. The exports were \$1,105,742.15, or \$306,251.36 in excess of those of last year. Trade, not only with the United States, but with all countries, has materially improved here lately.

Table E shows the navigation of this port in 4,749 vessels entered and 4,678 cleared, the decrease on American vessels being very sensible, five only having entered and eight cleared during the year. The carrying trade by sailers is now greatly monopolized by Italian vessels, which cost much less in the building and can be sailed so economically, seamen's wages being so low and their victuals so coarse and cheap that other flags cannot compete with them. They are, however, receiving a severe blow as regards Italy from the competition of British and Italian steamers that carry goods to the United States and England at such low freights as to oblige shippers to prefer steam to sail. We have two lines of British steamers between Leghorn and the United States, touching at other Italian ports; one is to New York, two sailings a month, and another to Boston, leaving once a month. Besides these, there are five lines of English steamers, two to London and three to Liverpool, that take goods at low rates of freight for the principal ports in the United States, with transhipment (at their expense) at London or Liverpool on other steamers.

## IMPORTS FROM THE UNITED STATES.

Respecting the principal articles imported from the United States, I will state that tobacco shows an increase over 1878 of \$234,000, Indian corn of \$6,422.80, while petroleum gives a decrease of \$24,743.75, and cotton-seed oil of \$116,650, owing to the last crop of olive-oil in Tuscany having been a very abundant one, and prices therefore low. The next one will be barely one-fourth of the average, and as a consequence the demand for cotton-seed oil will revive, as it is used largely to adulterate olive-oil for the English markets when prices of the latter are high. The olive-oil shipped here to the United States is pure, because the Americans pay what it is worth, while the English look far more to price than to quality.

EMILIO MASI.

UNITED STATES CONSULATE,  
*Leghorn, October 17, 1879.*

A.—Statement showing the general imports at Leghorn, Italy, for the year ending September 30, 1879.

Articles.	Quantity.	Value entered.	Whence imported.
Mineral waters.....kilos..	18, 027		
Wine:			
In casks.....liters..	83, 700		
In bottles.....number..	20, 051		
Vinegar.....liters..	736		
Beer:			
In casks.....do.....	15, 000	\$1, 027, 287 66	{ United States, Austria, Belgium, France, Germany, England, Holland, Spain, Portugal, and Tunis.
In bottles.....number..	7, 652		
Liquors of all kind.....liters..	380, 999		
Olive oil.....kilos..	217, 004		
Oils, not named.....do.....	2, 953, 421		
Mineral oils.....do.....	5, 156, 195		
Coffee.....do.....	1, 089, 657		
Succory.....do.....	375, 260		
Molasses.....do.....	5, 008		
Sugar:			
Refined.....do.....	693, 776		
Crude.....do.....	5, 218, 308		
Confectionery.....do.....	5, 453		
Biscuits.....do.....	3, 681		
Sirups.....do.....	11, 885		
Cocoa.....do.....	125, 773	1, 790, 176 52	{ United States, Austria, Belgium, France, Germany, England, Holland, Spain, Portugal, Greece Egypt, Tunis, and Turkey.
Chocolate.....do.....	571		
Cinnamon.....do.....	23, 150		
Pepper and spices.....do.....	276, 636		
Tea.....do.....	2, 510		
Vanilla.....do.....	46		
Mustard.....do.....	6, 916		
Tobacco:			
In leaves.....do.....	1, 403, 638		
Cigars.....do.....	8		
Manufactured.....do.....	572		
Acids of all kind.....do.....	279, 828		
Soda and potash.....do.....	219, 043		
Chemical products.....do.....	2, 309, 753		
Medicinal herbs.....do.....	18, 568		
Cassia and tamarinds.....do.....	172, 397	268, 273 47	{ United States, Austria, Belgium Egypt, France, Germany, England, Holland, Russia, Sweden, Norway, Denmark, Tunis, and Turkey.
Tan bark.....do.....	14, 776		
Gums.....do.....	1, 143, 993		
Soap:			
Ordinary.....do.....	46, 356		
Perfumed.....do.....	10, 517		
Wax.....do.....	381		
Perfumery.....do.....	2, 284		
Colors and dyestuffs.....do.....	1, 351, 643		
Varnish.....do.....	24, 686	152, 993 22	{ United States, Austria, Belgium, France, Germany, England, Holland, Tunis, and Turkey.
Silk of all kind.....do.....	6, 568		
Blacking.....do.....	35, 487		
Kemp.....do.....	126, 903		
Kemp cordage.....do.....	2, 852	344, 554 98	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Switzerland, Turkey, Spain, Portugal, and Tunis.
Thread of hemp.....do.....	170, 945		
Tissue of hemp.....do.....	327, 613		
Buttons.....do.....	188		
Hemp clothing.....do.....	5, 412		
Cotton, in mass.....do.....	77, 162		
Thread of cotton.....do.....	1, 327, 200	1, 526, 641 58	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Switzerland, and Turkey.
Tissue of cotton.....do.....	833, 060		
Cotton blankets.....do.....	6, 118		
Cotton ribbons.....do.....	4, 366		
Cotton velvet.....do.....	8, 670		
Wool.....do.....	274, 546		
Hair.....do.....	464, 466		
Thread of wool.....do.....	1, 175	479, 915 53	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Switzerland, Tunis, and Turkey.
Mattresses.....do.....	253		
Tissue of wool.....do.....	98, 973		
Tissue of hair.....do.....	194		
Woolen flannels.....do.....	1, 324		
Woolen blankets.....do.....	1, 271		
Woolen carpets.....do.....	1, 969		
Silk:			
Raw.....do.....	1, 317	112, 550 27	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Switzerland, Tunis, and Turkey.
Cocoons.....do.....	5, 412		
Silk velvet.....do.....	28		
Tissue of silk.....do.....	5, 064		
Sewing silk.....do.....	880		
Charcoal.....do.....	9, 800		
Fire-wood.....do.....	258, 000		
Cabinet wood.....do.....	106, 859	105, 094 48	{ America, Egypt, France, Germany, England, Russia, Tunis, and Switzerland.
Casks.....do.....	1, 343		
Furniture.....do.....	2, 956		
Wood works, not named.....do.....	69, 142		
Straw hats.....number..	1, 804		



## A.—Statement showing the general imports at Leghorn, Italy, &amp;c.—Continued.

Articles.	Quantity.	Value entered.	Whence imported.
Rags of all kind.....kilos.	2,574	\$39,026 34	{ United States, Austria, Belgium, Egypt, France, Germany, and England.
Paper, white and colored.....do.	30,053		
Playing cards.....packages.	108		
Lithographs.....kilos.	2,506		
Cardboard.....do.	4,466		
Printed books.....do.	13,073	750,703 96	{ South America, Austria, Belgium, Egypt, France, Germany, Eng- land, Switzerland, Tunis, and Turkey.
Blank books.....do.	224		
Skins, raw, green, and dry.....do.	1,433,945		
Furs.....do.	1,788		
Gloves.....pairs	480		
Boots and shoes.....do.	118	1,020,021 79	{ Austria, Belgium, Egypt, France, Germany, England, Holland, Spain, Portugal, Switzerland, and Turkey.
Leather.....kilos.	1,529		
Iron ore.....do.	2,363,084		
Pig-iron, in mass and pieces.....do.	3,549,402		
Iron, in bars and otherwise.....do.	2,977,595		
Iron and steel rails.....do.	4,712,481	475,576 51	{ United States, Austria, Belgium, Egypt, France, Germany, Eng- land, Holland, Sweden, Norway, Tunis, and Turkey.
Iron of second fabrication.....do.	357,974		
Steel, in bars and otherwise.....do.	134,579		
Blacksmith tools.....do.	227,003		
Copper and brass, in pieces.....do.	715,995		
Lead, in mass and pieces.....do.	266,968	2,179,136 36	{ United States, Austria, Belgium, Egypt, France, Greece, Ger- many, England, Holland, Rus- sia, Spain, Portugal, Tunis, and Turkey.
Tin.....do.	4,526		
Zinc.....do.	57,341		
Machinery.....do.	384,108		
Gold.....on value.	32		
Silver, in bars.....kilos.	37	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Jewelry, gold and silver.....do.	207		
Watches and clocks.....number.	5		
Precious stones.....kilos.	5,679		
Marble, rough.....do.	1,190		
Marble and alabaster works.....do.	2,034,685	2,179,136 36	{ United States, Austria, Belgium, Egypt, France, Greece, Ger- many, England, Holland, Rus- sia, Spain, Portugal, Tunis, and Turkey.
Stones and earths (for arts and trades).....kilos.	236,236		
Bricks.....number.	37,647		
Sulphur.....kilos.	57,663,080		
Coals.....do.	334,218		
Earthenware, common and fine.....do.	31,287	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Plate-glass.....do.	132,992		
Crystal work.....do.	5,686		
Looking-glasses.....do.	110,950		
Window-glasses.....do.	39,990,858		
Grain.....do.	5,756	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Oats.....do.	12,100		
Chestnuts.....do.	336,784		
Rice.....do.	23,089		
Flour.....do.	513,416		
Bran.....do.	12,274	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Paste.....do.	3,971		
Bread and sea-biscuits.....do.	102,164		
Starch.....do.	1,050,361		
Oranges and lemons, salted.....do.	304,160		
Dry fruits.....do.	23,874	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Carobs.....do.	15,536		
Vegetables.....do.	336,392		
Seeds of all kinds.....do.	1,260,000		
Olive-kernel cakes.....do.	10		
Horses.....number.	2	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Poies.....do.	1,460		
Fresh meat.....kilos.	23,860		
Salt meat.....do.	420		
Meat, preserved.....do.	312		
Game.....do.	1,830	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Leeches.....do.	6,368,664		
Fish, fresh, dry, salted, and smoked, kilos.	1,451		
Caviar.....kilos.	1,611		
Butter, fresh and salted.....do.	48,616		
Cheese.....do.	300	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Eggs.....do.	120,066		
Grease of all kind.....do.	96,456		
Candles.....do.	608		
Honey.....do.	60,687		
Wax, yellow.....do.	3,790	1,803,710 89	{ Austria, Belgium, Egypt, France, Germany, Greece, England, Hol- land, Russia, Spain, Portugal Sweden, Norway, Switzerland Tunis, and Turkey.
Glue.....do.	10,011		
Sponges.....do.	10,168		
Coral: Raw.....do.	1,114		
Worked.....do.	80,925		
Manure.....do.	18,582		
Stearic acid.....do.	66		
Feathers.....do.	37,935		
Bones and horns.....do.	248		
Sausages.....do.			

## A.—Statement showing the general imports at Leghorn, Italy, &amp;c.—Continued.

Articles.	Quantity.	Value entered.	Whence imported.
Musical instruments ..... kilos..	256	\$185,736 32	{ Austria, Belgium, Egypt, France, Germany, England, Holland, and Switzerland.
Optical and surgical instruments, kilos .....	1,153		
Mercery:			
Common ..... kilos..	38,211		
Fine ..... do.....	3,449		
Rubber ..... do.....	2,669		
Hats ..... number..	3,513		
Articles for umbrellas..... kilos..	735		
Objects of art..... do.....	57,006		
Total of the imports .....		12,225,399 88	
Total for preceding year .....		14,400,969 06	
Total amount of duties collected .....		1,248,988 30	
Total for preceding year .....		1,309,854 13	

## B.—Statement showing the general exports from Leghorn, Italy, for the year ending September 30, 1879.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Mineral waters ..... kilos..	6,144	\$1,167,530 15	{ United States, Austria, Belgium, Egypt, France, Germany, Eng- land, Holland, Russia, Switzer- land, Tunis, and Turkey.
Wine:			
In casks ..... liters..	422,800		
In bottles ..... number..	36,134		
Beer ..... liters..	100		
Liquors ..... do.....	524		
Olive oil ..... kilos..	3,452,015	692,719 07	{ South America, Austria, Belgium, Egypt, France, Germany, Eng- land, Holland, Russia, Switzer- land, Tunis, and Turkey.
Mineral oils ..... do.....	5,307		
Succory ..... do.....	463		
Confectionery ..... do.....	1,790,206		
Tea biscuits ..... do.....	527		
Chocolate ..... do.....	20		
Spices, not named ..... do.....	680	1,335,378 38	{ United States, Austria, Belgium, Egypt, France, Germany, Eng- land, Holland, Russia, Spain, Portugal, Switzerland, Sweden, Norway, Tunis, and Turkey.
Tobacco, manufactured ..... do.....	1,062		
Acids of all kind ..... do.....	3,447,978		
Medicinal articles ..... do.....	831,687		
Chemical articles ..... do.....	84,135		
Medicinal herbs ..... do.....	168,806		
Manna, in sorts ..... do.....	136	124,563 55	{ United States, Austria, Belgium, Egypt, France, Germany, Eng- land, Holland, Russia, and Tur- key.
Bark ..... do.....	308		
Lemon peel ..... do.....	1,266		
Medicinal articles, not named ..... do.....	1,089,449		
Gums ..... do.....	6,762		
Soap ..... do.....	1,474,663		
Perfumery ..... do.....	158	862,003 23	{ United States, Egypt, France, England, Tunis, and Turkey.
Colors and dyestuffs ..... do.....	1,788,767		
Varnish ..... do.....	600		
Hemp ..... do.....	3,458,298		
Hemp cordage ..... do.....	507,918		
Nets ..... do.....	3,838		
Hemp thread ..... do.....	25,266	15,656 74	{ Austria, Egypt, France, Greece, England, Holland, Tunis and Turkey.
Tissue of hemp ..... do.....	8,405		
Hemp cloth ..... do.....	1,247		
Clothing, ready-made ..... do.....	49,151		
Cotton thread ..... do.....	13,136		
Tissue of cotton ..... do.....	6,797		
Buttons and ribbons ..... do.....	184	116,468 94	{ United States, Austria, Belgium, Egypt, France, Germany, Eng- land, Spain, Tunis, and Turkey.
Cotton velvet ..... do.....	175		
Wool ..... do.....	81,546		
Hair of all kind ..... do.....	460		
Mattresses ..... do.....	1,809		
Tissue of wool ..... do.....	1,790		
Flannels ..... do.....	128		
Woolen carpets ..... do.....	1,013		
Woolen clothing ..... do.....	7,541		

## B.—Statement showing the general exports from Leghorn, Italy, &amp;c.—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Charcoal .....	kilos. 152, 240	\$1, 073, 448 63	{ United States, Austria, Egypt, France, Germany, Greece, England, Russia, Tunis, and Turkey.
Firewood .....	do. 1, 800		
Cabinet wood .....	do. 78, 527		
Casks and barrels .....	do. 16, 296		
Furniture .....	do. 158, 401		
Wood works .....	do. 893, 246		
Carriages .....	number. 7		
Cane and bushes .....	kilos. 11, 425		
Straw braids .....	do. 57, 310		
Straw hats .....	number. 1, 972, 123		
Silk, raw and cocoons .....	kilos. 36, 372	279, 582 88	{ Egypt, France, Greece, England, Holland, Spain, Portugal, Tunis, and Turkey.
Silk thread .....	do. 49, 671		
Tissue of silk .....	do. 1, 054		
Silk clothing .....	do. 5, 109		
Rags of all kinds .....	do. 3, 996, 754		
Paper:			
White .....	kilos. 56, 340	358, 623 91	{ Austria, United States, Egypt, France, Germany, Greece, England, Switzerland, Tunis, and Turkey.
Colored .....	do. 158, 965		
Prints and lithographs .....	do. 835		
Cardboard .....	do. 37, 402		
Printed books .....	do. 20, 758		
Manuscripts .....	number. 196		
Skins .....	kilos. 249, 821	163, 404 41	{ South America, Egypt, France, Germany, England, Switzerland, Tunis, and Turkey.
Gloves .....	pair. 1, 416		
Valises .....	number. 890		
Boots and shoes .....	pair. 549		
Iron ore .....	kilos. 30, 301, 000		
Copper ore .....	do. 300, 000		
Zinc ore .....	do. 2, 602, 675		
Minerals of any other kind .....	do. 1, 170, 203		
Pig-iron .....	do. 10, 902		
Iron of second fabrication .....	do. 95, 666		
Blacksmith's tools .....	do. 5, 614	974, 094 74	{ United States, Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Spain, Portugal, Sweden, Norway, Tunis, and Turkey.
Copper, in cakes .....	do. 2, 296		
Copper works .....	do. 6, 949		
Lead .....	do. 2, 159		
Antimony and arsenic, in metallic state .....	kilos. 268, 391		
Mercury .....	do. 97, 818		
Machinery, not named .....	do. 1, 358		
Silver, in bars .....	do. 17, 322		
Jewelry, in gold .....	do. 21		
Gold and silver watches .....	number. 188		
Clocks .....	do. 5	654, 872 35	{ United States, Austria, Belgium, Egypt, France, Germany, England, Holland, Russia, Spain, Portugal, Switzerland, Tunis, and Turkey.
Watchmakers' articles .....	kilos. 27		
Precious stones .....	do. 18		
Marble, in blocks, brought here by railway .....	kilos. 7, 126, 003		
Alabaster, rough .....	do. 381, 508		
Marble and alabaster works .....	do. 7, 692, 672		
Stones and earthen, for arts and trades, kilos .....	4, 369, 001		
Bricks .....	number. 1, 418, 314		
Sulphur, raw and refined .....	kilos. 107, 369		
Coals .....	do. 21, 500		
Stone works, not named .....	do. 143, 180	206, 375 43	{ United States, Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Spain, Portugal, Switzerland, Tunis, and Turkey.
Majolica works .....	do. 274, 943		
Porcelain, white and gilt .....	do. 4, 118		
Glass windows .....	do. 600		
Looking-glasses .....	do. 950		
Glass articles .....	do. 562		
Glass bottles .....	do. 10, 930		
Grain .....	do. 713, 559		
Oats .....	do. 225, 270		
Chestnuts .....	do. 899, 099		
Rice .....	do. 313, 358	206, 375 43	{ United States, Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Spain, Portugal, Switzerland, Tunis, and Turkey.
Flour .....	do. 18, 749		
Bran .....	do. 286, 262		
Paste .....	do. 786, 260		
Bread and sea biscuits .....	do. 9, 996		
Starch .....	do. 215		
Oranges and lemons, salted .....	do. 24, 282		
Fruits, fresh .....	do. 54, 385		
Carobs .....	do. 53, 232		
Fruits, dry .....	do. 278, 891		
Vegetables, preserved .....	do. 1, 691	206, 375 43	{ United States, Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Spain, Portugal, Switzerland, Tunis, and Turkey.
Seeds of all kind .....	do. 7, 425		
Oil-kernel cakes .....	do. 33, 860		
Fresh vegetables .....	do. 351, 524		

## B.—Statement showing the general exports from Leghorn, Italy, &amp;c.—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Animals.....number	6, 856		
Fresh meat.....kilos	530, 697		
Salt meat.....do	81, 261		
Meat, preserved.....do	19, 103		
Fish, fresh, dry, and salted.....do	300, 785		
Caviar.....do	350		
Fresh butter.....do	948		
Cheese.....do	53, 468		
Eggs.....do	1, 002, 560		
Grease of all kinds.....do	13, 567	\$2, 540, 901 15	{ United States, Austria, Belgium, Egypt, France, Germany, Greece, England, Holland, Russia, Spain, Portugal, Switzerland, Tunis, and Turkey.
Candles.....do	165		
Honey.....do	45, 650		
Wax, yellow and white.....do	9, 885		
Glue.....do	3, 632		
Coral:			
Raw.....do	1, 345		
Worked.....do	7, 459		
Bones and horns.....do	1, 757, 096		
Manure.....do	164, 793		
Wood works.....do	3, 068		
Musical instruments.....number	4		
Optical instruments.....kilos	138	95, 746 53	{ United States, Austria, Egypt, France, Germany, Greece, England, Tunis, and Turkey.
Silk umbrellas.....do	366		
Fine arts.....do	387, 000		
Total exports.....		10, 667, 570 09	
Total for preceding year.....		10, 746, 769 59	
Total amount of duties collected.....		101, 167 13	

## C.—Statement showing the imports from the United States to the port of Leghorn for the year ending September 30, 1879.

Articles.	Quantity.	Value, including costs and charges.	Whence imported.
Tobacco.....hogsheads	2, 387	\$524, 000 00	
Petroleum.....barrels	11, 417	65, 973 50	
Do.....cases	161, 700	227, 007 50	
Alcohol.....barrels	1, 750	26, 000 00	
Cotton-seed oil.....do	4, 703	112, 850 00	} United States of America.
Rosin.....do	162	243 00	
Corn.....quarters	31, 219	148, 082 80	
Starch.....cases	450	108 00	
Anthracite coal.....tons	150	600 00	
Total imports.....		1, 108, 864 80	
Total for preceding year.....		988, 039 25	

## D.—Statement showing the value of declared exports from the consular district of Leghorn, Italy, to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Alabaster works.....	\$523 34	\$2, 376 03	\$206 74	\$2, 338 21	\$5, 443 22
Argols.....	28, 852 72	6, 720 41	9, 219 41	15, 212 07	60, 004 61
Anise seed.....			226 96		226 96
Boric acid.....	17, 866 33	14, 039 39	34, 714 20	27, 088 08	93, 710 00
Barrels, empty.....	2, 215 60	3, 210 88	1, 740 28	1, 014 11	8, 180 87
Citrons, candied.....	10, 871 17	2, 362 43	29, 530 20	119, 886 35	192, 670 15
Cherries, dry.....	1, 697 84				1, 697 84

D.—Statement showing the value of declared exports from the consular district of Leghorn Italy, to the United States, &c.—Continued.

Articles.	Quarter ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Chalk	\$95 23			\$89 55	\$184 78
Cheese		\$46 32			46 32
Gentian root	604 42		\$980 25	192 15	1,656 82
Hemp	2,911 42	12,394 49	1,713 57		17,019 48
Iron ore			24,355 83	51,836 43	76,192 26
Juniper berries	1,138 63	444 16		54 04	1,636 83
Laurel leaves	468 48	201 54	853 30		1,023 32
Marble works	1,032 86	547 61		1,753 21	3,333 68
Orris root	1,332 44	1,492 19	1,287 10	191 95	4,303 68
Olive oil	8,999 78	35,986 31	23,361 64	14,790 23	83,137 96
Paste		366 90			366 90
Pumice stone	2,494 41	2,469 10	1,738 58	4,059 90	10,761 99
Pumice-stone bricks		309 95	252 07	750 57	1,372 59
Rags	76,879 90	126,780 72	131,366 45	80,582 60	415,609 67
Soap	28,516 06	38,733 69	28,991 74	25,714 29	121,955 78
Soap stock		3,511 51	391 76	3,388 48	7,289 75
Siena earth	1,048 58	1,700 36	1,701 33	2,320 39	6,770 66
Senna leaves		2,650 92	2,010 31	686 48	5,356 71
Talc	1,375 62	1,078 29	1,613 40	1,138 47	5,205 78
Tow	1,390 66		1,438 49		2,829 15
Umber earth	1,182 61	374 58	625 42	578 80	2,761 41
Wine	62 53	593 08	707 86	1,558 86	2,922 33
Miscellaneous	239 45	116 71	367 55	1,346 94	2,070 65
Total in United States gold	191,801 98	258,596 57	298,773 44	356,570 16	1,105,742 15
Total for preceding year	169,099 67	140,693 72	264,138 55	225,558 85	799,490 79
Increase	22,702 31	117,902 85	34,634 89	131,011 31	306,251 36
Decrease					

E.—Statement showing the navigation at the port of Leghorn, Italy, for the year ending September 30, 1879.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Austrian				8	3,412	8	3,412
British		239	201,207	64	17,358	303	218,565
Belgium		7	7,337	6	6,684	13	14,021
Danish				9	1,313	9	1,313
Dutch		18	13,128	2	473	20	13,601
French		437	151,062	49	4,890	486	155,952
German		33	20,576	9	1,886	42	22,462
Greek				30	4,709	30	4,709
Italian		1,510	534,834	2,288	112,100	3,798	646,934
Norwegian				8	2,637	8	2,637
Russian				1	882	1	882
Swedish				6	2,160	6	2,160
Spanish		4	1,779	12	1,608	16	3,387
Turkish				3	364	3	364
Tunisian				1	45	1	45
United States	United States			2	1,266	2	1,266
	Genoa			2	1,289	2	1,289
	Marseilles			1	668	1	668
Total		2,248	929,863	2,501	163,214	4,749	1,093,077

E.—Statement showing the navigation at the port of Leghorn, Italy, &c.—Continued.

Flag.	To—	CLEARED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Austrian				7	2,301	7	2,301
British		237	199,657	59	13,896	296	213,553
Belgian		7	7,337	5	6,404	12	13,741
Danish				8	1,198	8	1,198
Dutch		18	13,128	2	473	20	13,601
French		437	151,002	47	3,826	484	154,828
German		31	20,570	10	2,079	41	22,649
Greek				31	5,336	31	5,336
Italian		1,508	533,704	2,234	109,376	3,742	643,080
Norwegian				5	1,508	5	1,508
Russian				1	313	1	313
Swedish				5	1,557	5	1,557
Spanish		4	1,779	11	1,293	15	3,072
Turkish				2	285	2	285
Tunisian				1	45	1	45
United States				8	4,801	8	4,801
	United States						
	Genoa						
	Marseilles						
Total		2,242	927,177	2,436	154,691	4,678	1,081,868

NOTE.—The statistic tables published by the port authorities do not enable me to state the number of vessels of each flag arrived from each country separately, but only the total number of vessels of each flag entered and cleared during the year.

## MESSINA.

*Report, by Consul Owen, on the trade and commerce of Messina for the year 1878.*

I have the honor to submit my report on the commerce and navigation at this port, together with the tabulated statements, for the year ending December 31, 1878.

### IMPORTS.

It will be observed that the imports amount to \$4,539,015, on which duty was paid to the amount of \$300,435, an increase over the previous year of \$7,832.76. Aside from the cargoes of petroleum of the total value of \$64,000, there have been no direct importations from the United States, although our cotton goods are now found on the market. These are obtained through German and English agents, and have been found, in quality and style, to compare favorably with foreign manufactures. There is no doubt but in time they will be preferred. As has been often remarked, the lack of direct steam communication with the United States prevents the import trade from assuming any great proportions.

### EXPORTS.

The export trade amounted to \$9,136,386, an increase over that of 1877 of \$1,254,670. This increase is due to the abundant crops of fruit and wine, the freight facilities, and the large demand for these articles from England, France, and the United States. The total value of declared

exports from the consular district for the year ending September 30, 1879, \$2,474,541, is in excess, as regards the same period last year, in the sum of \$350,656.

The number of boxes of green fruit, the principal article of export, shipped from Messina to the United States for the year ending April 30, 1879, was 662,298, while that of the previous year was 500,203, a difference of 162,095 boxes for the present year.

#### NAVIGATION.

The total amount of tonnage that entered the port of Messina was 1,141,465, of which 5,846 tons is represented by fourteen American vessels, a smaller number than has ever before been known. There has been an increase in the arrival of English steamers for America and a corresponding decrease in the rates of freight charged. The Florio, an Italian company, are building two fine steamers, designed for the transportation of fruit, which they propose placing on the line between Sicily and the United States. Should it become a success, a strong competition may be expected.

#### CROPS.

Owing to a backward spring and dry summer, the crops have suffered, and it is thought that hardly one-half of the wine usually made could be obtained this season. The yield of fruit, while not equal to that of last year, promises well, and of all the products is the most abundant.

#### PUBLIC WORKS.

Work on the new bonded warehouses will begin next month. Parliament having authorized the building of the railway between Palermo and Messina, it is expected that the construction of the line will soon be commenced. When completed, it will be of great advantage to both cities, as well as to the intermediate country.

#### AGENCIES.

I regret to say that I have been informed by the agent at Catania that he is unable to procure the required statistics in season for the compilation of the tables, as required by the regulations. He hopes, however, to obtain them later, and will forward them when received. In this connection, it can nevertheless be stated that the export trade, and particularly that with the United States, is in a prosperous condition.

#### SYRACUSE.

The exports and imports from and into this port are, respectively, \$659,181 and \$85,307. There has been no direct trade with the United States.

#### GIOJA.

The shipment of crude olive oil from this port amounted to \$1,078,280, none of which was consigned to our merchants.

GEO. H. OWEN.

UNITED STATES CONSULATE,  
*Messina, October 4, 1879.*

*Statement showing the imports at Messina for the year ending December 31, 1878.*

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
Books.....kilos..	1, 177	\$1, 228	\$20	France, Germany, England, Italy.
Beef, salted and smoked.....do..	878	385	30	England.
Bran.....do..	108, 979	2, 860	157	Greece, Turkey, Prussia.
Beer.....do..		490	130	Germany, Austria, England, Italy.
Bread and biscuit.....kilos..	74, 362	5, 885	770	Do.
Bricks and earthen tubes.....do..	22, 000	1, 600	Free.	Do.
Coffee.....do..	177, 039	53, 042	43, 200	Brazil, Italy.
Chemical products.....do..	10, 610	1, 775	90	England, France, Italy.
Cocoa.....do..	3, 686	1, 160	210	Italy.
Cheese.....do..	46, 607	16, 350	378	Switzerland, Holland, Italy.
Copper and brass.....do..	39, 976	29, 725	817	England, France.
Coal.....do..	42, 272, 454	222, 485	Free.	Do.
Colors.....do..	6, 771	3, 010	136	Do.
Candles, stearine.....do..	1, 942	645	50	Italy, France.
Cotton texture.....do..	269, 229	293, 050	36, 480	England, France, Italy.
Cotton galleons.....do..	1, 393	4, 000	300	Do.
Cotton velvet.....do..	7, 993	12, 630	1, 250	Do.
Cotton, spun.....do..	313, 202	152, 540	7, 045	Do.
Cod and stock fish.....do..	959, 587	85, 510	8, 284	England, Sweden, Norway.
Crystal and glass wares.....do..	165, 805	23, 060	1, 756	Austria, Germany, France.
Casks, empty.....do..		4, 175	115	Italy.
Cinnamon.....kilos..	381	145	60	Do.
Caps and hats.....do..		37, 700	2, 223	Italy, France, England.
Dye-stuffs.....kilos..	1, 429, 419	111, 000	16	England, France, Germany.
Earthenwares.....do..	15, 187	7, 000	120	France, Italy.
Essences.....do..	1, 114	5, 220	140	Italy.
Flour.....do..	267, 878	25, 845	1, 020	Turkey, Prussia.
Fruit, green and dry.....do..	10, 626	1, 230	90	Italy.
Furniture.....do..		8, 790	370	Do.
Gold and silver coin.....do..		15, 530	Free.	Do.
Grease of all kinds.....kilos..	30, 551	8, 635	55	Do.
Hemp ropes.....do..	30, 993	5, 315	100	England, Spain, France.
Hemp and linen, spun.....do..	57, 845	26, 080	600	Do.
Hides, raw and tanned.....do..	1, 501, 113	265, 890	900	Brazil, Russia.
Iron rails.....do..	1, 497, 211	538, 500	2, 880	England, France.
Iron, worked.....do..	1, 110, 421	76, 990	16, 615	Do.
Iron wire.....do..	11, 771	2, 290	200	Do.
Iron plates.....do..	16, 833	2, 900	170	Do.
Iron ore.....do..	842, 480	56, 000	3, 920	Do.
Iron tools.....do..		28, 450	1, 360	Italy, England.
Juice of lemon, concentrated.....kilos..	47, 163	12, 590	95	Italy.
Indigo.....do..	1, 545	5, 000	15	England, Italy.
Lead.....do..	32, 576	3, 400	50	England, France.
Linen cloth.....do..	57, 510	26, 685	2, 550	England, Holland.
Liquors.....do..		16, 470	1, 040	England, France.
Machinery.....do..		29, 680	600	England, Italy.
Mercery.....do..		13, 030	800	Different countries.
Oils, not specified.....kilos..	688, 210	65, 540	33, 000	Do.
Paper.....do..	11, 252	5, 600	390	France, Germany, Italy.
Pepper and pimento.....do..	32, 810	14, 330	805	Italy.
Rice.....do..	1, 572, 294	157, 210	Free.	Italy, Holland.
Resin.....do..	210, 433	64, 790	1, 095	Italy.
Sugar.....do..	750, 873	134, 730	39, 600	Holland, France, Italy.
Steel in bars.....do..	93, 922	12, 310	2, 005	England, France.
Silk goods.....do..		14, 390	4, 305	France, Italy.
Starch.....kilos..	19, 215	3, 040	80	England, Italy.
Spices.....do..	806	490	95	Different countries.
Tin in bars.....do..	4, 310	1, 510	10	England, France.
Timber.....do..	520, 686	99, 770	Free.	Italy, Austria.
Tobacco.....do..		175	10	Italy.
Wines.....do..		1, 210	95	France, Germany, Italy.
Wheat and other grain.....kilos..	21, 034, 447	1, 891, 900	70, 845	Russia, Turkey.
Woolen goods.....do..		71, 900	6, 420	France, England, Germany, Italy.
Wooden works.....kilos..	26, 755	8, 990	400	Italy, Germany.
Wax.....do..	18, 974	7, 790	160	Italy, France.
Zinc.....do..	55, 075	8, 000	400	England, France, Italy.
Sundry articles.....do..		233, 440	2, 913	Different countries.
Total.....		4, 539, 015	300, 435	



Statement showing the exports from Messina for the year ending December 31, 1878.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Almonds, shelled and unshelled.....kilos..	1,409,628	\$402,695	France, United States, England, Russia.
Brimstone.....do..	4,124,136	86,845	Do.
Beef, salted and smoked.....do..	1,584	390	Egypt, France, Turkey, South America.
Bran.....do..	8,583	980	Italy.
Basket works.....do..		200	Do.
Chemicals.....kilos..	252,602	15,235	Italy, France.
Capers, salted and pickled.....do..	38,141	11,450	Egypt, France, Italy.
Cheese.....do..	6,517	2,285	Do.
Chestnuts.....do..	68,000	2,105	United States, France, England, Egypt.
Casks, empty.....hectolitres..	11,711	16,440	Italy.
Coal.....kilos..	231,000	1,360	Do.
Dye-stuffs, ground and unground.....do..	133,785	10,725	Do.
Essences.....do..	252,097	1,624,225	United States, France, England, Germany, &c.
Filberts.....do..	3,570,030	493,380	Do.
Furniture.....do..	1,353	400	Italy.
Fish, salted.....do..	84,489	8,425	Italy, Austria.
Fruit:			
Lemons and oranges.....boxes..	1,300,615	2,281,780	United States, Russia, England, France, Austria, Germany.
Green, salted.....kilos..	1,784,494	169,402	Do.
Dry, not specified.....do..	416,377	39,278	Do.
Furs, prepared.....do..	3,619	4,210	Italy.
Forage.....do..	25,100	815	Do.
Grease of all kinds.....do..	92	25	Italy, France.
Hats.....do..		10,135	Italy.
Hair.....kilos..	3,040	1,500	Italy, France, England.
Herbs, flowers and medical leaves.....do..	49,919	8,750	Egypt, France, Italy, Holland.
Juices, not specified.....do..	106,512	23,470	United States, France, England, Germany.
Juices of lemon, concentrated and raw.....kilos..	1,603,148	429,460	Do.
Licorice roots.....do..	1,050	220	Do.
Manna.....do..	42,390	21,730	Do.
Mustard seed.....do..	78,107	16,080	Do.
Machines.....do..	2,831	530	Italy.
Medical drugs, not specified.....do..	45,295	19,860	Do.
Olive oil.....do..	6,014,297	1,740,980	United States, England, France, Russia, Germany.
Pumice stone.....do..	86,463	2,100	Do.
Pistachio nuts.....do..	18,480	13,205	Do.
Rags.....do..	97,370	5,790	Do.
Seeds, not specified.....do..	279,817	29,420	England, France, Italy, Austria.
Skins, raw and tanned.....do..	113,733	76,120	France, Italy.
Silk, raw.....do..	69,136	622,635	Do.
Tartars.....do..	2,262,170	595,265	England, France, United States, Austria.
Wooden hoops.....do..	3,943,540	24,210	France, Italy.
Wine, in bottles and casks.....do..		251,460	Do.
Other articles.....do..		70,816	Different countries.
Total.....		9,136,386	
Amount of duty paid.....		78,455	

Statement showing the navigation at the port of Messina for the year ending December 31, 1878.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
United States..	United States, Italy, Turkey, France, Greece.....			14	5,846	14	5,846
Austrian.....	Italy, Austria, France, England.....			24	7,317	24	7,317
British.....	United States, England, Italy, Austria, Spain, Black Sea.....	310	264,921	43	7,851	353	272,772
Belgian.....	Belgium, France, Italy.....	6	7,393			6	7,393
Danish.....	England, Italy, Russia, Baltic.....	5	4,243	17	2,111	22	6,354
Dutch.....	do.....	31	27,363	9	1,549	40	28,912
French.....	France, Italy, England, Turkey, Egypt.....	64	76,697	9	1,348	73	78,045

*Statement showing the navigation at the port of Messina, &c.—Continued.*

Flag.	From—	ENTERED.					
		Steamers.		Sailing ves- sels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Greek .....	France, Italy, England, Turkey, Egypt	6	852	240	49,936	246	50,788
German .....	Italy, Russia, Baltic, England	29	18,642	3	636	32	19,278
Norwegian .....	United States, Russia, Italy, Baltic	9	3,948	36	8,944	45	12,892
Russian .....	Black Sea, England, Baltic, France	10	11,538			10	11,538
Swedish .....	United States, England, Baltic, Black Sea	5	1,890	2	629	7	2,519
Samian .....	Turkey, Black Sea			5	856	5	856
Turkish .....	Turkey, Black Sea, Egypt, Greece			24	3,811	24	3,811
Italian .....	Italy, United States, Black Sea, Eng- land, Baltic, Turkey, India	950	507,682	222	51,084	1,172	558,766
	Coasting trade			2,035	74,378	2,035	74,378
Total .....		1,425	925,169	2,683	216,296	4,108	1,141,465

Flag.	To—	CLEARED.					
		Steamers.		Sailing ves- sels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
United States ..	United States, Italy, Turkey, France, Greece			18	7,348	18	7,348
Austrian .....	Italy, Austria, France, England			22	6,890	22	6,890
British .....	United States, England, Italy, Austria, Spain, Black Sea	306	261,721	40	7,290	346	269,011
Belgian .....	Belgium, France, Italy	6	7,393			6	7,393
Danish .....	England, Italy, Russia, Baltic	5	4,243	15	1,870	20	6,113
Dutch .....	do	31	27,363	7	1,279	38	28,643
French .....	France, Italy, England, Turkey, Egypt	63	76,092	7	1,120	70	77,212
Greek .....	do	6	852	230	47,856	236	48,708
German .....	Italy, Russia, Baltic, England	28	18,120	3	636	31	18,756
Norwegian .....	United States, Russia, Italy, Baltic	9	3,948	34	8,230	43	12,178
Russian .....	Black Sea, England, Baltic, France	9	11,000			9	11,000
Swedish .....	United States, England, Baltic, Black Sea	5	1,890	2	629	7	2,519
Samian .....	Turkey, Black Sea			5	856	5	856
Turkish .....	Turkey, Black Sea, Egypt, Greece			20	3,310	20	3,310
Italian .....	Italy, United States, Black Sea, Eng- land, Baltic, Turkey, India	943	505,502	162	37,284	1,105	542,786
	Coasting trade			1,915	70,058	1,915	70,058
Total .....		1,411	918,124	2,480	194,656	3,891	1,112,780

### PALERMO.

*Report, by Consul Bayly, on the trade and commerce of the port of Palermo, and on the industries and condition of the people of all Sicily, 1879.*

I have the honor to submit herewith, in accordance with the requirement of consular regulations, my annual report for this consular district, showing the value and description of the exports and imports; a tabulated statement of the navigation; the exports and imports to and from the United States, with a brief notice of the industries of the island, its social and material development, and the progressive improvement of its foreign and domestic trade.

## INDUSTRIES AND CONDITION OF SICILY.

Sicily, in consequence of its being destitute of iron and coal, and scantily supplied with fuel and water-power, has scarcely more than a nominal manufacturing interest. The energies and wealth of the people, as in the days of the Roman Empire, are absorbed in agricultural pursuits and commercial enterprises. The establishment of constitutional liberty, the breaking up of religious corporations, and the suppression of monastic orders have contributed materially to advance social interests and to develop the resources of the island. The forcible release of society from the bondage of the church has given a new impulse to the refinements of social and domestic life. Confidence has been restored, and men unite to build up and foster the business interests of the country. Population has increased, and the condition of the masses has been greatly improved by the generalization of trade and increased educational facilities.

Although Sicily has made such satisfactory progress in the arts of peace since the accession of the Italian Government, and is beginning to lay deep and broad the foundation of its commercial prosperity, the standard of social life has not made the progress due to the period. The squalor and degradation of the masses under the Bourbons of Naples was so inveterate that sufficient time has not elapsed to effectually eradicate the effects of their fatal régime.

Sicily, territorially isolated, with the energies and aspirations of the people fettered by a merciless tyranny and forced destitution, the breath of social life was well-nigh spent when its political freedom was accomplished. Public spirit had become so torpid, and its intellectual stagnation so great, that the common sympathies and interests of mankind had almost ceased to pulsate through its domain. Physical conditions, I venture to say, contribute to impede the progress of social development. The placid, dreamy, delightful clime seems in nowise conducive to habits of study and intellectual pursuits. One gravitates, as it were, by some inevitable law to a life easy going, indolent, and purposeless. In the last decade a large portion of the population have risen to affluence and enjoy that immunity from physical labor requisite to mental productiveness, yet there is but little intellectual activity. Proneness to pursue old methods, and to cling with pertinacity to the customs of their forefathers, are strikingly characteristic. I may add, however, that this imperviousness to new ideas is somewhat relaxing its grip in the commercial cities of the island by daily intercourse with foreign social elements, but "*il dolce far niente*" being hereditary, contagious, and infectious in Sicily, the process of improvement is one of absorption rather than of effort.

With the present opportunities for education and moral enlightenment, one may reasonably hope that the coming generation will outgrow those narrow minded prejudices and attachment to obsolete ideas which now impede, to a great extent, social and material development.

## POPULATION.

The population of Palermo in 1847 was 178,350. In 1862 it was 187,180, and by the last census of 1878 it had increased to 219,398, an increase in sixteen years of 42,218.

## MINERAL PRODUCTS.

Sulphur, salt, and gypsum are the principal minerals of Sicily. Porphyry, alabaster, and marbles of great variety and beauty are met with in different portions of the island.

*Sulphur.*—This is the principal branch of mining industry, and it is a great source of wealth to the island. The mines are mostly in the vicinity of Girgenti and Licata, near the seaboard. The mines of Lercara further inland are quite detached. The exportation from Palermo is confined to the produce of the mines of Lercara, which is of superior quality and commands the highest prices. This branch of industry has suffered severely in the last few years owing to the unprecedented low prices, and the continuance of expensive, wasteful, and slipshod methods of production. With a judicious application of mechanical processes even at the present low prices the mines could be worked with profit.

The value of the exportation from Palermo to the United States in 1878 was \$401,038, and in 1879 it did not exceed \$211,230.

*Salt*, marine and rock, is produced, to a great extent, and largely exported. It is the chief product of Trapani, from which port 150,000 tons were shipped this year to Norway, Sweden, and the United States—a considerable increase over last year.

## RAILWAYS.

Public attention continues to be directed to the improvement of railway communication. The expansion of commerce is in great measure due to the increased facilities of transport from the interior to the seaboard. Domestic and foreign trade exhibit a progressive improvement where railways have been constructed, and those that are now being completed will be equally as advantageous to the development of commerce.

*Railways completed.*—Railway communication has been opened between the following cities: Between Palermo and Gergenti; between Licata and Catania, by way of Cattanissetta; between Catania and Messina, and Catania and Augusta.

*Railways in course of construction.*—The following railways are almost completed: From Palermo to Trapani; from Trapani to Marsala, and from Marsala to Mazzora.

*Railway projected.*—From Aragona to Caldare.

## AGRICULTURE.

Great advance has been made in the last few years in developing agriculture in this part of the island. The area devoted to the production of cereals and fruits is annually increasing, and the capabilities of the extensive and fertile plains, susceptible of almost indefinite expansion, are enhanced by the adoption of new methods of culture, and by a more careful application of irrigation. Bountiful harvests have augmented the commerce of this port to a magnitude which it never heretofore reached, and, I doubt not, Palermo shows a larger percentage of business increase than any port in the Mediterranean. Almost every article of production has exhibited an increase of quantity, and the increased facilities of internal commerce, and the development of steam communication with the great commercial centers of the world, have furnished accessible markets for the superabundant crops.

The new year, in contrast with the three preceding years, opens most inauspiciously in a commercial point of view. Under the adverse influence of the failure of staple crops, there will be a marked change in the character and result of the trade of this port during the ensuing year. The crops of cereals, according to the latest and most reliable estimate, are insufficient for home consumption, and, in consequence, there will be a great falling off in the exports, and an appreciable increase in the imports. The markets of Italy and France, heretofore supplied to some extent from Sicily, will have to seek other sources of supply. The harvest in Sicily is quite as bad as in other parts of Italy, and the gloomy prospects of the laboring class to obtain sufficient food to support life are most appalling. In consequence of the great preponderance of the agricultural industry in Sicily, the laborer has few directions in which he can find employment. Poverty and wretchedness are therefore attendant on a failure of staple crops. The deficit in food substances is not greater than in other countries of Europe, but an agricultural crisis is more severely felt because Sicily lacks the stimulus and support of manufactures.

The grain crop of Sicily in 1878 was 3 per cent. above a medium yield, and this year it is 24 per cent. below, making a difference of 27 per cent. in favor of the crop of last year.

This report embraces the following statistical information :

1. A statement of the general exports for the year ending September 30, 1879.
2. A statement of the general imports for the same period.
3. A statement of the navigation for the same period.
4. A summary statement of the declared value of the exports and imports for the year ending September 30, 1879, and the two preceding years.
5. A statement showing the amount of shipping entering the port for the same period.
6. Statement showing the value of declared exports to the United States during the four quarters of the year ending September 30, 1879.
7. Statement showing the value of the imports from the United States for 1879 and the two preceding years.
8. Summary statement of the value of the imports and exports from and to the United States for the same period.
9. Statement showing the total amount of the American shipping entering the port for the same period.

#### CONDITION OF THE CONSULATE.

The amount of business transacted at this consulate has almost quadrupled in the last five years. In the year ending June 30, 1874, not more than 425 invoices were legalized, and the total of fees received was \$1,653.16. In the year ending September 30, 1879, no less than 1,700 invoices were legalized, and the total of fees received and returned to the government by me was \$6,071.78. Financial gain for the government this year, \$4,418.62.

S. P. BAYLY.

UNITED STATES CONSULATE,  
*Palermo, October 25, 1879.*

Statement showing the commerce at Palermo for the year ending September 30, 1879.

## IMPORTS.

Articles.	Quantity.	Value entered.	Amount of duties.	Whence imported.
<b>COLONIALS.</b>				
Cocoa .....	Not stated.	\$7,940	Not stated.	England and colonies.
Coffee .....	do	225,560	do	Do.
Indigo .....	do	1,025	do	England.
Pepper .....	do	6,400	do	England and colonies.
Rum .....	do	22,100	do	United States via France.
Spices .....	do	6,240	do	England and colonies.
Sugars .....	do	309,640	do	England, Holland, United States.
Tea .....	do	1,225	do	England.
Woods .....	do	12,960	do	Italy, United States, France, England, Austria.
<b>MANUFACTURES.</b>				
Cotton yarn .....	Not stated.	625,400	Not stated.	France, England.
Cotton wool .....	do	899,640	do	France, England, Germany.
Earthenware and glass .....	do	46,900	do	Italy, France, England.
Fancy goods .....	do	19,750	do	Do.
Hardware .....	do	25,621	do	France, England.
Linens .....	do	134,000	do	Italy, France, England.
Silks .....	do	96,300	do	Italy, France.
Woolens .....	do	239,600	do	Italy, France, England, Germany.
<b>DIVERS.</b>				
Copper .....	Not stated.	35,423	Not stated.	France, England.
Coals .....	do	1,114,500	do	England.
Deal boards .....	do	12,100	do	France, England.
Drugs .....	do	6,500	do	Do.
Fish, dry salt .....	do	53,900	do	Russia, France, England.
Flax .....	do	19,305	do	Russia.
Hides and skins .....	do	115,324	do	South America, through France and Italy.
Iron .....	do	212,100	do	England.
Lead .....	do	16,000	do	England, France, Spain.
Leather .....	do	19,300	do	France, Russia.
Pitch and tar .....	do	9,111	do	England.
Saltpeter .....	do	4,200	do	England, France.
Shooks .....	do	45,600	do	United States.
Stationery and books .....	do	10,625	do	Italy, France, England.
Steel .....	do	4,300	do	France, England.
Tin plates .....	do	23,200	do	Do.
Tobacco .....	do	152,600	do	United States.
Wax .....	do	1,900	do	Italy, Austria.
Wool .....	do	1,003	do	Italy, Barbary States.
†Horned cattle .....	do	146,300	do	Do.
Horses and mules .....	do	59,100	do	Do.
Petroleum .....	do	359,000	do	United States.
<b>Total</b> .....		<b>5,101,792</b>		

## EXPORTS.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
Brimstone .....	pounds.. 103,945,000	\$996,500	United States, France, England, Germany, and Italy.
Corn and grain .....	bushels.. 42,640	63,520	France and Italy.
Essences .....	pounds.. 16,260	37,430	United States, France, England, and Germany.
Salted fish and salted fish in oil .....	do 545,000	26,300	France, England, and Italy.
Fruits (green oranges and lemons), boxes .....	2,397,900	3,716,745	United States, France, England, Germany, and Italy.
Fruits (almonds, walnuts and filberts) .....	bags.. 19,600	153,000	Do.
Lemon juice .....	pipes.. 600	72,500	Do.
Linseed .....	bags.. 3,945	22,700	Do.
Liquorice paste .....	pounds.. 18,300	1,880	Do.
Macaroni .....	boxes.. 10,640	40,560	Do.
Manna .....	do.. 225	12,900	Do.
Argols and cream of tartar .....	pounds.. 82,965	11,570	United States and England.

Statement showing the commerce at Palermo, &c.—Continued.

EXPORTS—Continued.

Articles.	Quantity.	Value, including costs and charges.	Whither exported.
<b>Oils:</b>			
Olive ..... casks..	2, 895	\$50, 373	United States, England, France, Germany, and Italy.
Linseed ..... do.....	95	2, 280	Do.
Lemon ..... do.....	193	34, 840	Do.
Rags ..... bales.....	1, 521	46, 100	United States, England, and Italy.
Sumac ..... bags.....	643, 400	3, 111, 700	United States, France, England, Germany, and Italy.
Kid skins ..... doz.....	8, 945	26, 990	United States, France, England, and Italy.
Wine ..... pipes.....	5, 200	330, 600	United States, France, England, Germany, and Italy.
Miscellaneous .....		215, 650	Do.
Total .....		8, 982, 638	

Statement showing the navigation at the port of Palermo for the year ending September 30, 1879.

Flag.	From—	ENTERED.					
		Steamers.		Sailing vessels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
Austrian .....	Trieste .....	—	—	12	3, 944	12	3, 944
Belgian .....	Belgium .....	5	6, 560	—	—	5	6, 560
British .....	England .....	340	306, 065	37	6, 279	377	312, 344
	United States .....	65	58, 518	3	915	68	59, 433
	Holland .....	29	25, 092	6	723	35	25, 815
Dutch .....	Denmark .....	4	3, 780	2	380	6	4, 160
Danish .....	Marseilles .....	48	60, 908	2	460	50	61, 366
French .....	Germany .....	18	12, 100	6	2, 265	24	14, 365
German .....	Greece and Russia .....	—	—	29	4, 605	29	4, 605
Greek .....	Italy .....	832	314, 452	2, 625	115, 625	3, 457	430, 077
Italian .....	France .....	85	76, 210	28	6, 100	113	82, 310
	England .....	—	—	5	1, 228	5	1, 228
	United States .....	2	2, 050	25	9, 124	27	11, 174
	Barbary States and Levant .....	—	—	34	4, 500	34	4, 500
Norwegian .....	Sweden and Norway .....	—	—	15	4, 921	15	4, 921
	United States .....	—	—	3	1, 233	3	1, 233
Ottoman .....	Turkey .....	—	—	14	2, 128	14	2, 128
Russian .....	Russia .....	—	—	3	735	3	735
Spanish .....	Spain .....	—	—	10	729	10	729
United States .....	United States .....	—	—	8	3, 323	8	3, 323
Total .....		1, 428	865, 733	2, 867	169, 217	4, 295	1, 034, 950

Statement showing the general commerce for the years ending September 30, 1877, 1878, and 1879.

Years.	Imports.	Exports.	Total value.
1877 .....	\$5, 555, 580	\$9, 710, 750	\$15, 266, 330
1878 .....	5, 456, 802	9, 556, 523	15, 012, 325
1879 .....	5, 101, 792	8, 982, 638	14, 084, 430

Statement showing the amount of shipping entering the port in 1877, 1878, and 1879.

Vessels.	1877.		1878.		1879.	
	No.	Tons.	No.	Tons.	No.	Tons.
Steamers .....	1, 201	762, 450	1, 217	756, 830	1, 428	865, 733
Sailing vessels .....	5, 156	217, 580	4, 973	206, 623	2, 867	169, 217
Total .....	6, 357	980, 030	6, 190	963, 453	4, 295	1, 034, 950

Statement showing the value of declared exports from the consular district of Palermo to the United States during the four quarters of the year ending September 30, 1879.

Articles.	Quarters ending—				Total for the year.
	December 31, 1878.	March 31, 1879.	June 30, 1879.	September 30, 1879.	
Almonds .....	\$14, 034	\$462			\$14, 496
Brimstone .....	65, 408	58, 457	\$36, 284	\$51, 080	211, 229
Canary seed .....	4, 407	472	530	3, 617	9, 026
Cosmetics .....	1, 463	1, 297	838	824	4, 422
Fruits .....	299, 475	551, 707	695, 673	239, 414	1, 786, 269
Filberts .....	10, 250	1, 243			11, 493
Macaroni .....	2, 505	8, 222	588	1, 260	7, 573
Manna .....	1, 985	2, 457	196	2, 881	7, 519
Oil of lemons .....		2, 393	623	5, 412	8, 428
Olive oil .....	1, 110	2, 381			3, 500
Argols .....	10, 362	345			10, 707
Rags .....				3, 425	3, 425
Sumac .....	124, 162	74, 577	92, 783	117, 803	409, 325
Wine .....	868	4, 216	581	1, 935	7, 600
Walnuts .....	1, 221				1, 221
Miscellany .....	2, 533	3, 043	1, 765	495	7, 836
Total .....	539, 792	706, 272	829, 859	428, 146	2, 504, 069

Statement showing the value of imports from the United States to Palermo for the years ending September 30, 1877, 1878, and 1879.

Articles.	Value, 1877.	Value, 1878.	Value, 1879.
Coffee .....	\$560	\$800	\$1, 000
Cotton cloth .....	200	765	2, 000
Cotton, colored .....	350	800	1, 600
Chemical products .....	125	329	1, 200
Clocks .....	28	200	600
Cordage .....			10, 000
Engines .....		300	200
Furniture .....	270	585	400
Fish, canned .....	80	75	50
Fruits, candied .....	90	50	200
Lard .....	95	125	300
Leather .....	3, 000	5, 690	9, 960
Petroleum .....	379, 640	395, 600	350, 000
Sugar .....			200
Saddlers' works .....		75	800
Tobacco .....	145, 525	139, 184	152, 600
Woods .....	34, 000	42, 000	55, 000
Total .....	563, 963	586, 358	595, 110

Statement showing the value of the merchandise imported and exported from and to the United States in 1877, 1878, and 1879.

Years.	Imports.	Exports.	Total value.
1877 .....	\$563, 963	\$2, 576, 401	\$3, 140, 364
1878 .....	586, 358	2, 063, 017	2, 649, 375
1879 .....	595, 110	2, 504, 069	3, 099, 179



*Statement showing the amount of American shipping entering the port in 1877, 1878, and 1879.*

Vessels.	1877.		1878.		1879.	
	No.	Tons.	No.	Tons.	No.	Tons.
Sailing vessels .....	25	11,000	15	7,965	8	3,323

### MALTA.

*Report, by Vice-Consul Eynaüd, on the commerce and navigation of Malta; for the year 1879.*

I hereby transmit some statistics of trade and some remarks on the commerce of this island during 1879.

It is not possible to obtain here full statistics of imports and exports. The collector of customs has for some time past endeavored to obtain from the government council the passing of an ordinance making it compulsory for importers and exporters to give declarations of quantities and values, but he has not succeeded in impressing his colleagues in council with the importance of the measure; hence only the number of packages of merchandise, without in most instances any clearer specification, is given in the inward manifests presented at the custom-house. No outward manifests are sent in, nor are they required by law.

The trade of this island in 1879 was not satisfactory, profits generally must have been small, and where old stocks were realized severe losses had to be suffered; but, towards the autumn, trade in general revived, and most articles rose considerably in price, which led to a good deal of speculation, especially in sugar and coffee. The demand for spring potatoes and cummin seed, the products of the island, was good. Full and satisfactory prices were made on these articles in the English markets.

*Coals.*—Malta is keeping up its reputation as an advantageous port and coaling station, both by the facilities it affords as a secure haven and for quick dispatch. No port in the Mediterranean can as yet vie with it in the rapidity of discharging or loading of coals. The general dullness of trade all over the world affected this branch also, and there has been some falling off on the aggregate of arrivals of vessels and on the quantity of coals imported as compared with the year 1878. The importation of coal in 1879 amounted to 343,803 tons, all, excepting 65,999 tons, being from South Wales, against 350,042 tons imported in 1878, 246,766 in 1877, 297,787 in 1876, 262,115 in 1875, and 323,365 tons in 1874.

The arrivals in 1879 were as follows: Ships of war, 133, nearly all British, none American; sailing and steam yachts, 33, none American; mercantile steamers, 3,012, measuring 2,805,568 tons register, of which 2,618 steamers were under the British flag; sailing-ships, 1,865, measuring 217,618 tons register. Of these, by far the largest numbers were under the Italian flag. The total number of arrivals, therefore, amounts to 5,043, against a total of 5,583 in 1878. In mercantile steamers alone the diminution in 1879, as compared with 1878, was in number 361 and in tonnage 146,415 tons.

Included in the above arrivals in 1879 are 596 vessels bound to or coming from Eastern ports via the Suez Canal, viz, 17 ships of war, 29 transports, and 550 mercantile steamers, the latter measuring 769,961

tons register, all having on board about 43,426 passengers, mostly military, but some civilians. These figures show the following diminution when compared with the preceding year, viz, 31 in the number of ships and 7,739 in that of passengers, but the difference in the capacity of tonnage was 40,491 larger in 1879 than that of 1878, thus showing that the ships going through the canal are of the larger class.

*Coffee and sugar* continue to be almost entirely imported from England by steamers.

Of *cleaned rice*, 25,507 bags were entered in 1879, all Indian, and nearly all via England. This, as compared with 1878, is 3,696 bags more. The consumption in 1878 was increased by the presence in our island of the Indian troops and their followers, but in 1879 the demand is attributable to the high price of wheat and the larger use of the cheaper grain. No rice from the Southern States of the United States has been sent here for some time.

#### AMERICAN TOBACCO.

*Leaf tobacco*.—In 1879, the following importations were made of the growth of the United States of America, viz:

	Hogsheads.	Cases.
Purchased in and shipped from England .....	937	95
Shipped from Gibraltar.....	46	7
Purchased in New York and shipped via England.....	71	4
Purchased in New York and shipped direct.....	120	5
Purchased in Holland and shipped direct.....	70	..
Purchased in Italy and shipped direct.....	165	..
Purchased in Marseilles and shipped direct.....	24	..
	<hr/> 1,433	<hr/> 111

against 874 hogsheads and 362 cases in 1878.

The year 1879 ended with large stocks, some being old importations, costing high, but mostly low Kentucky and Western lugs. The demand has been limited, owing to the unsatisfactory trade in cheap cigars manufactured in Malta.

Of manufactured tobacco, cavendish, and cigars, the imports in 1879 were as follows: Purchased in and shipped from England, 1,477 packages; from Gibraltar, 35 packages; from New York, by transshipment, 702 packages; from New York direct, 251 packages; cigars from sundry ports, 197 cases; total, 2,662 packages.

In 1878, the total imports were 2,162 packages. All imported in 1879, with the exception of the cigars, were evidently manufactured in the United States. This trade has been good, and although the styles and size of pieces are very varied, ready sale has been found for all, the fresh worked being more salable, as a general rule.

#### PETROLEUM.

Only refined, in cases, is dealt with here. The stock in government depot on January 4, 1879, was 69,096 cases; imports in 1879, 3,500 cases; delivered from January 4, 1879, to January 3, 1880, 30,862 cases; in depot, on January 3, 1880, 41,734 cases.

In 1877 the imports amounted to 48,480 cases; in 1878, to 66,073 cases; so that although very little was sent here in 1879 still not half the stock existing at the commencement of the year was worked off, and yet 24,894 cases are known to be on the way to this from United States ports. This branch of trade has been unsatisfactory to importers who were overstocked in proportion to the demand, and competition,

with an anxiety to realize, kept prices on so low a level as not to admit of any margin for profit. Large sales are not generally made, but importers are obliged to be content with selling lots of 25 to 100 cases at a time, and for such sales the price to-day is \$1.38 to \$1.44 per case, the equivalent of to remit 5s. 1d. to 5s. 5d. sterling per case in short sight bill on London to cover cost, freight, and insurance. There are two government depots here—one, a supplementary one, is some distance from the center of trade, hence it is very inconvenient. The chamber of commerce has lately represented to the government the prejudicial effect on the trade in petroleum which the storing in out of the way places has, and the government has promised to give its early attention to the suggestion of the chamber, and will probably assign for this purpose some stores which have lately become vacant, and which are near the older and more convenient depot.

*Alcohol.*—Pure, white American is the favorite quality here, but German distillery is also imported. During 1879 only 700 barrels were imported from the United States.

*Rosin and logwood* are not much used here. They sell very slowly, so that very little of either is imported.

*Wheat.*—As only hard qualities are ground here, none from the United States is brought to this port.

*Flour* is not imported for bread-making. Only small quantities are brought from Trieste and Marseilles for confectioners' use.

*Lumber.*—American sawing labors under the disadvantage of high freight, so that we are supplied from Trieste and Venice at less cost.

*Cotton manufactures.*—Cheap and light cloths are imported from England and taken by dealers to Barbary for sale or for barter against produce. We have not had any American cloth for many years, but the time is doubtless approaching when this article will be able to compete favorably.

#### EXPORTS.

The following are the quantities of articles for food cleared at our custom-house in 1879, for local consumption, and upon which an import duty was levied, viz:

Wheat.....	quarters..	101,599
Indian corn.....	do.....	810
Barley.....	do.....	5,816
Beans.....	do.....	19,677
Cotton seed.....	pounds..	4,585,700
Olive oil.....	American gallons..	317,758
Cattle.....	head.....	9,281

In 1879 only three vessels arrived here from the United States, all with part cargoes from New York. One, of 284 tons register, was under the United States flag, one Italian, and the third Austro-Hungarian. One vessel under the United States flag put into Malta Harbor bound to England. Two vessels under British flag took cargoes from this for New York, one being a full cargo of coarse salt, and the other a part cargo consisting of cotton rags in bales and some scrap iron.

C. BREED EYNAUD.

UNITED STATES CONSULATE,  
Malta, January 26, 1880.

## AUSTRIA-HUNGARY.

*Report, by Consul-General Weaver, of Vienna, on the trade and commerce of Austria-Hungary for the years 1878 and 1879.*

Pursuant to consular instructions I have the honor to transmit my annual report of the commerce and navigation of the empire of Austria-Hungary for the year 1878. The material from which the tables have been compiled has been generally obtained from official sources, and although in some cases the values are only approximations, yet they are the most correct and reliable that could for the present be procured. The totals for 1877, as now published, differ considerably from what they were reported one year ago. This discrepancy is brought about by a subsequent revision of prices and quantities by a commission appointed for the purpose, but whose report was not published sufficiently early to be utilized in the first instance.

## IMPORTS.

The total value of the importations for 1878 as per Statements I and II, was 579,547,828 florins, being an increase of 4.4 per cent. when compared with 1877. The tables do not include the amount of gold and silver imported. For 1878 the imports of these coined and in bar, as far as controlled by the customs officers, amounted to 52,724,476 florins instead of 30,345,170 florins for 1877.

The chief articles showing an increase are coffee, leather, and manufactures of woollen and silk textiles and raw silk, while on the contrary weaving material (wool, cotton, and flax), animals, hides and skins, and petroleum exhibit considerable decrease, as may be seen from the following comparative statement showing the values of the principal imports into Austria-Hungary for the years 1878, 1877, and 1876:

Articles.	1878.	1877.	1876.
	<i>Florins.</i>	<i>Florins.</i>	<i>Florins.</i>
Coffee .....	45,361,821	38,063,386	25,207,352
Grain .....	41,211,513	43,007,546	16,530,185
Wool .....	34,883,820	45,232,380	21,428,720
Cotton .....	29,305,051	33,100,389	47,303,310
Animals .....	26,257,181	35,783,319	18,811,696
Leather and manufactures of .....	24,721,640	19,458,820	16,107,800
Tobacco .....	22,212,015	22,651,200	33,150,800
Woollen textiles .....	22,076,180	15,924,820	19,972,560
Cotton yarn .....	21,542,547	21,811,857	17,720,500
Petroleum, resin, tar .....	21,389,918	23,239,427	30,119,680
Silk textiles .....	18,295,600	15,546,600	24,192,200
Hides, skins .....	16,217,554	18,595,225	11,145,710
Silk, raw .....	15,517,080	13,696,830	15,478,750
Paints, colors .....	12,645,713	11,656,944	10,568,455
Flax, hemp, jute .....	12,429,336	15,530,555	11,372,800
Oils .....	12,381,840	11,994,761	12,582,656
Woollen yarn .....	12,377,185	12,207,770	11,378,500
Others .....	190,722,634	157,486,819	191,068,577
Total .....	579,547,828	535,227,048	534,245,051

## EXPORTS.

The total value of the exports from Austria-Hungary for 1878 was 698,302,513 florins, being an increase of 36,270,304 florins, or 5½ per cent.

when compared with 1877. In the following are not included the exports of precious metals and coins to the amount of 15,280,569 florins for 1878, and 15,550,120 florins for 1877.

The chief articles of exportation, showing an increase, are as follows: grain, flour, sugar, fancy goods, woolen textiles, clothing, and ironware; while building timber, animals, wool, leather, glass, tobacco, and linen textiles manifest considerable decrease, as may be seen from the following comparative

*Statement showing the values of the principal exports from Austria-Hungary for the years 1878, 1877, and 1876.*

Articles.	1878.	1877.	1876.
	<i>Florins.</i>	<i>Florins.</i>	<i>Florins.</i>
Grain.....	112,399,454	102,846,595	36,359,336
Animals.....	55,033,542	71,823,778	19,535,951
Flour.....	54,816,546	34,844,232	18,189,900
Sugar.....	49,955,852	36,500,872	30,783,700
Fancy articles.....	48,106,900	36,122,800	42,012,910
Timber, building.....	38,498,112	47,892,798	30,008,843
Woolen textiles.....	24,591,640	20,710,546	16,154,384
Wool.....	18,521,800	27,328,000	27,573,120
Ironware.....	16,915,648	12,233,916	21,433,038
Leather, and manufactures of.....	16,801,270	18,119,550	14,041,548
Clothing.....	16,283,260	9,931,340	7,274,750
Oil-seeds.....	12,401,217	11,618,535	1,805,140
Glassware.....	11,550,400	16,024,840	27,527,032
Tobacco.....	11,449,180	14,168,960	7,114,800
Woodenware.....	11,019,318	10,227,868	12,283,286
Coal.....	10,733,081	10,220,530	13,140,713
Linen textiles.....	10,290,062	13,578,015	18,458,198
Others.....	178,985,131	167,818,934	239,737,138
<b>Total.....</b>	<b>698,302,513</b>	<b>662,032,209</b>	<b>590,633,847</b>

#### BALANCE OF TRADE.

The balance of trade in favor of the country for 1878 amounted to 118,754,685 florins, out of a total of 1,277,850,341 florins, being the largest balance for many years. The following table gives the relative increase for the last two years:

Exports and imports.	1878.	1877.
	<i>Florins.</i>	<i>Florins.</i>
Total exports.....	698,302,513	662,032,209
Total imports.....	579,547,828	555,227,048
<b>Difference.....</b>	<b>118,754,685</b>	<b>106,805,161</b>

The chief articles of which the exportation exceeded the importation for 1878 were as follows:

	<i>Florins.</i>
Grain.....	71,000,000
Sugar.....	50,000,000
Flour.....	46,000,000
Fancy articles.....	37,000,000
Wood.....	37,000,000
Animals.....	19,000,000
Manufactures of leather.....	14,000,000
Ironware.....	14,000,000
Wine, beer, and liquor.....	12,000,000
Clothing.....	9,000,000
Paper.....	8,000,000

## ENTRY DUTIES.

The total amount of duties collected on importation for 1878 amounted to 22,570,985 florins, being an increase of 2,905,791 florins when compared with preceding year. Of the whole amount 40 per cent. was collected from tropical products, principally on coffee, 17 per cent. on textile fabrics, 9 per cent. on drugs, perfumes, and dyestuffs, and 7 per cent. on yarns, while tobacco produced only 14,773 florins.

The duties collected on exports for 1878 amounted to 137,536 florins, principally on rags and animal products.

Since January, 1879, by virtue of a ministerial decree, all customs duties have been collected in gold or silver, but where payments were made in silver, the premium on gold, which was determined monthly from the average value of the gold 8-florin piece on the Vienna Exchange for the previous month, was added. The average premium on gold for 1879, has been about 15 per cent. The relative proportions of gold and silver paid for customs duties for the first nine months of the year 1879 are, gold, 6,031,138 florins, and silver 8,742,018 florins.

## SOURCE OF IMPORTS.

In absence of official or other data from which to determine the countries from whence arrived the imports into this empire, it becomes impossible to report specifically the character and amounts of the several articles imported into this empire from the United States; and furthermore, as much of the commerce between the United States and Austria is carried on through Germany, passing through which they lose their American origin, and are shipped as German products, the official report even would fail to give a correct idea of the extent of trade at present existing between our country and this empire. But the chief articles of importation from the United States as yet are petroleum, tobacco, canned fruits and meats, lard and tallow, cheese and hams, sewing-machines, agricultural implements, kitchen utensils, and hardware.

## TARIFF OF JUNE 27, 1878.

The effect of the new tariff law, which went into operation January 1, 1879, will be probably to diminish the importation of articles of American production since it increases generally the duties on our chief articles of exportation. On canned fruits the entry duty becomes almost equivalent to a prohibition, amounting to 35 florins per 100 kilograms. During nine months of the present year the importation of delicacies fell off from 90 tons in 1878 to 70 tons in 1879. In general the result of the increase of the tariff of entry duties has correspondingly decreased the amount of imports, whereas the duties collected increased over one million, or from 13,951,399 florins in the first nine months of 1878 to 15,152,533 florins for the corresponding period of 1879.

## DECLARED EXPORTS TO THE UNITED STATES.

Statement III gives an abstract of all invoices authenticated by the consular officers of the United States in this empire, showing for the year ending September 30, 1879, a total value of \$4,070,691.88, being an increase of \$370,710.39, when compared with preceding year. The leading articles of exportation were as follows: Buttons, 25 per cent.; dried fruits, 19 per cent.; glass and china ware, 12 per cent.; linen and cotton

textiles, 5 per cent.; drugs and chemicals, 5 per cent.; gum,  $4\frac{1}{2}$  per cent.; fancy articles, 4 per cent.; cloth and woolen textiles,  $3\frac{1}{2}$  per cent.; gloves, 3 per cent.; leather, skins, and furs, 3 per cent.; and others, 16 per cent. These totals do not represent the whole trade of Austria-Hungary with the United States, since by the operation of our tariff laws certain manufacturers of Bohemia are required to present their invoices to our consul at Dresden for authentication, which are consequently incorporated with German exports.

The leading articles exported from Hungary to the United States are dried fruits, mineral water, and wines; from Bohemia, glassware, woolen textiles, and gloves; from Trieste, dried fruits, gums, drugs, and chemicals; from Vienna, buttons, linen textiles, fancy articles, meerschaum pipes, and manufactures of leather and woolen textiles from its agency at Brünn.

#### NAVIGATION.

The entire sea-coast of Austria-Hungary extends along the Adriatic Sea from the Italian frontier to Albania, from the northwest to the southeast, for about 350 English miles in a straight line. This coast-front belongs to the provinces of Illyria and Dalmatia, each of which is divided into 4 customs districts. The district of Trieste embraces 11 ports of entry, the principal being Trieste, Capo d'Istria, and Pirano. The other Illyrian districts are as follows: Rovigno with 4 additional ports, Pola with 8 additional ports, and Lussinpiccolo with 12 additional ports. The 4 districts of Dalmatia are, Zara with 19 additional ports, Spalato with 21 other ports, Ragusa with 14 other ports, and Megline with 1 additional port, making a total of 8 districts, comprising 40 Illyrian and 59 Dalmatian, or a total of 99 ports of entry.

#### ENTRY AND DEPARTURE OF VESSELS FOR 1878.

The arrivals of sea-going vessels at these ports for 1878, as per Statement IV, were 34,992 sailing vessels and 15,040 steamers, being a total of 50,032 vessels, aggregating a tonnage of 4,991,822 tons, or a decrease of 11,373 tons when compared with 1877.

The departures for 1878 were 35,084 sailing vessels and 15,050 steamers, being a total of 50,134 vessels, aggregating a tonnage of 4,998,019 tons, or an increase of 7,038 tons when compared with 1877. The tonnage of the steamers arriving in 1878 was 3,954,305 tons, or an increase of 117,336 over preceding year. Of the ninety-nine ports of entry, Trieste is the largest, having for 1878 an entry tonnage of 335,290 tons by sailing vessels and 832,829 tons by steamers, or a total entry tonnage of 1,168,119 tons.

#### ARRIVALS AND DEPARTURES BY NATIONALITIES.

Statement V gives the nationalities of the vessels trading at the Austrian ports as follows: Austrian, 85 per cent.; Italian, 8 per cent.; British, 4 per cent.; Greek, 1 per cent., leaving only 2 per cent. for the twelve other nationalities, of which the Swedish is the only one of importance. The tonnage of the nine vessels of the United States arriving during the year 1878 was 5,086 tons. It is a noteworthy fact that 85 per cent. of the entire shipping of the empire is carried in vessels under the Austrian flag.

#### AUSTRIAN MERCHANT MARINE.

Statement VI gives the number and tonnage of the several classes of vessels comprising the merchant marine of Austria-Hungary as they

existed on the 31st day of December, 1878, showing an aggregate of 7,887 vessels, with a total tonnage of 327,729 tons; of these there were 95 steamers and a tonnage of 57,701 tons.

#### MOVEMENT OF AUSTRIAN VESSELS.

Statement VII exhibits the several foreign nations with which vessels of this empire carried on their commercial traffic for 1877. The following is the order of importance of arrivals from the several countries, viz: Turkey 42 per cent., Greece 22 per cent., Great Britain 10 per cent., Italy 9 per cent., Egypt 7 per cent., France 3 per cent., all other countries 7 per cent. The arrivals of Austrian vessels from the United States for 1877 amounted to 182 sailing vessels, aggregating 105,348 tons. The departures were in the same order, with but slight variations.

#### POST-OFFICES.

Statement VIII exhibits the transactions of the postal department of Austria-Hungary for 1877. The population of the empire is estimated at 37,418,000 inhabitants; the superficial area at 624,196 square kilometers; the number of post-offices is given at 5,986, being an average of one post-office for every 6,251 inhabitants. The number of letters sent in 1877 was 263,700,842, and the number of newspapers was 95,886,689, averaging 8.2 letters and 2.6 newspapers to each inhabitant. When compared with the leading European nations Austria takes the following order: Great Britain, 34.7; Switzerland, 23.7; Germany, 17.2; Holland, 14; Belgium, 14; France, 12.2; Austria-Hungary, 8.2; Italy, 6.2; Russia, 1.2. If Hungary be omitted from the calculation, the average of Austria becomes 10.7 letters per inhabitant.

#### TELEGRAPHS.

Statement IX gives in detail the telegraphic service of the provinces of Austria for 1878, and shows a general increase in comparison with 1877. The total length of line in Austria was 22,711 kilometers, and the length of wire 61,487. For the entire empire the length of line was 37,398 kilometers, with 115,954 kilometers of wire, of which the receipts were 4,901,417 florins, and the expenditures 4,982,449 florins. Total number of paying dispatches 8,370,600.

#### COINAGE OF MONEY.

The coinage by the mints at Vienna and Kremnitz during 1878 was as follows:

Character of pieces coined.	Vienna.	Kremnitz.	Total.
<b>Silver:</b>			
Four-gulden piece .....	294, 516		294, 516
One-gulden piece .....	18, 963, 072	5, 917, 374	24, 680, 446
<b>Copper:</b>			
One-kreuzer piece .....	158, 920	44, 781	203, 701
<b>Silver:</b>			
Trade thaler .....	3, 854, 515		3, 854, 515
<b>Gold:</b>			
Ducat, fourfold .....	448, 819		448, 819
Ducat, single .....	1, 348, 622		1, 348, 622
Eight-gulden piece .....	1, 013, 334	2, 492, 815	3, 506, 149
Four-gulden piece .....	27, 621	60, 094	87, 715
Total florins .....	26, 109, 419	8, 315, 064	34, 424, 483
Total previous year .....	19, 468, 353	4, 922, 703	24, 391, 056
Increase .....	6, 641, 066	3, 392, 361	10, 033, 427



## INTERNAL-REVENUE STAMPS.

The following table gives the receipts from the sale of revenue stamps for the years 1878 and 1877 in the several countries of Austria under the direction of the Reichsrath:

Character.	1878.	1877.
	<i>Florins.</i>	<i>Florins.</i>
Sale of stamps.....	14, 225, 765	16, 938, 452
Bank checks.....	775, 760	820, 230
Promissory notes.....	80, 878	60, 353
Playing-cards.....	162, 858	164, 309
Almanacs.....	146, 417	144, 619
Newspapers.....	962, 615	954, 818
Bills of lading.....	48, 803	54, 763
Total florins.....	16, 403, 096	17, 137, 544

## AUSTRIAN-HUNGARIAN BUDGET FOR 1879.

The gross receipts for the countries represented in the Reichsrath were estimated at 392,565,144 florins, the gross expenditures at 471,163,650 florins, leaving a deficit to be provided for of 78,598,506 florins. The principal sources of receipts are as follows:

	<i>Florins.</i>
Direct taxation.....	91, 000, 000
Entry duties on imports.....	24, 000, 000
Excise duty on beer and sugar.....	41, 000, 000
Monopoly of the sale of salt and tobacco.....	78, 000, 000
Stamp duties.....	17, 000, 000
Courts of justice.....	32, 000, 000
Lotteries.....	20, 000, 000
Receipts from post and telegraphic offices.....	18, 000, 000
Receipts from department of agriculture.....	10, 000, 000

The principal expenditures are as follows:

	<i>Florins.</i>
Imperial household.....	5, 000, 000
Department of the interior.....	16, 000, 000
Defense of the country.....	8, 000, 000
Religion and public instruction.....	15, 000, 000
Finances.....	76, 000, 000
Commerce.....	22, 000, 000
Agriculture.....	9, 000, 000
Department of justice.....	20, 000, 000
Civil pensions.....	14, 000, 000
Public debt.....	115, 000, 000
Quota of general expenses of the empire.....	133, 000, 000

The budget of Hungary, apart from the above, was as follows:

	<i>Florins.</i>
Total receipts.....	222, 208, 602
Total expenditures.....	256, 436, 380
Deficit.....	34, 227, 778

## PUBLIC DEBT.

On the 31st day of December, 1878, the public debt of the countries represented by the Reichsrath was as follows:

	<i>Million florins.</i>
Consolidated debt, interest payable in paper.....	1, 552
Consolidated debt, interest payable in silver.....	1, 229
Debt bearing no interest.....	123
Floating debt (in paper).....	83
Indemnities (in paper).....	12
Bonds due Bavaria (in silver).....	2
Repurchase of real estate bonds (in paper).....	184
Total.....	3, 185

The interest on the 2,781,000,000 florins of consolidated debt is 5 per cent. per annum. Hungary has a separate public debt of 660,000,000 florins, not included in the foregoing. Hungary has also to provide for the payment of about 30 per cent. of the common debt of Austria and a part of the common floating debt.

## VITAL STATISTICS OF VIENNA.

The population of the city of Vienna within the octroi lines was estimated at 715,285 at the close of the year 1878. There were additionally 20,000 troops garrisoned in the city, making a total of 737,285 inhabitants. According to the census of April 17, 1875, the population of Vienna and its suburbs, under the direction of the same police organization, was 1,020,770. The vital statistics are calculated, however, on the population of the ten districts of Vienna within the octroi lines, viz, on a population of 737,285 inhabitants, as explained above.

The total number of births during the fifty-two weeks previous to September 27, 1879, was 29,000, omitting still-births, of which there were 1,304. Of the above totals 12,276 and 588 respectively were illegitimate, or over 42 per cent. of the whole number. The total deaths were 21,153, of which 5,540 were children under one year of age. The following were the principal diseases and the number dying therefrom, viz:

Consumption .....	5,224
Bronchial diseases .....	2,283
Diseases of the brain .....	1,878
Diseases of the stomach and intestines .....	1,423
Diseases of the heart and circulatory system .....	931
Diphtheria .....	784
Small-pox .....	413
Typhoid fever .....	208
Measles .....	125

## MARKET PRICES OF VIENNA.

The following table gives the average prices of the principal articles of consumption in the Vienna markets, with the changes during the year ending in August, 1879 (reported quarterly):

Articles.	November, 1878.	February, 1879.	May, 1879.	August, 1879.
	Florins.	Florins.	Florins.	Florins.
Wheat flour .....	0.20	0.19	0.19	0.20
Rye flour .....	11	11	11	13
Bread, white .....	22	20	19	20
Bread, black .....	00	09	14	14
Potatoes .....	2.40	2.50	3.20	5.00
Apples .....	25	25	26	12
Beef, fore quarter .....	55	53	53	53
Beef, hind quarter .....	63	64	63	63
Veal .....	60	60	53	65
Pork .....	73	73	73	75
Butter .....	1.05	1.10	1.05	1.05
Milk .....	15	15	15	15
Rice .....	40	38	40	40
Chickens .....	90	85	85	80
Geese .....	3.00	2.90	2.90	2.65
Oats .....	3.40	3.20	3.30	3.35
Hay .....	40.00	35.00	36.70	28.50
Coal .....	13.00	13.00	12.00	12.40
Wood .....	60.00	60.00	60.00	55.00
Eggs .....	40	30	25	28

## GENERAL REMARKS.

*Trade.*—The Empire of Austria-Hungary has enjoyed general prosperity throughout 1879. But few important failures have been added during the year to the long list of insolvents that began in 1874. Returning confidence and the consequent appreciation of values of all kinds give strong indication that the worst is now over, and there appear to be well-founded hopes that trade and profitable business are on the point of resuming their former normal condition.

*Currency.*—During the present year the Imperial Government has succeeded by judicious management in so appreciating the value of its paper currency that it passes interchangeably with the silver coin, which is now abundant everywhere, although both are yet at a discount of 15 per cent. when compared with gold. One effect has been to render the value of the paper florin more constant, since during the past month its value as quoted on the Vienna exchange has not appreciably altered, being equivalent to 41½ cents.

*Harvests.*—The harvests, although not so abundant as usual, and suffering greatly from heavy downfall of rains while being gathered, will more than suffice for home consumption. For, while the importation of wheat during the first nine months of 1879 increased from 6,000 to 13,700 tons, the exportations likewise increased from 52,000 to 68,000 tons; and although the exportation of corn and barley shows marked decrease, the exportation of rye on the contrary manifests great increase.

*Prices.*—On account of the failure of the harvest in England and many other European countries, the prices of breadstuffs for the last half of the year experienced an extraordinary upward tendency. The average price of wheat in the province of Lower Austria on the last week of December, 1878, was 7.73 florins per hectoliter, and that of rye was 4.88 florins per hectoliter.

The following table will present succinctly the changes during the year of the average prices per hectoliter:

Date.	Wheat.	Rye.
	<i>Florins.</i>	<i>Florins.</i>
Last week in—		
December, 1878 .....	7.73	4.88
March, 1879 .....	7.94	5.05
June, 1879 .....	8.12	4.98
July, 1879 .....	8.32	4.95
August, 1879 .....	9.49	5.80
September, 1879 .....	9.70	6.54
October, 1879 .....	11.13	7.30
November, 1879 .....	10.05	7.26

The foregoing table exhibits the remarkable increase of 44 per cent. of the price of wheat in ten months' time, which must prove a fearful calamity for the poorer classes of this community. In Hungary, where agriculture forms so large a part of industry, considerable concern has been felt lest these high prices should induce the importation of American wheats, which they would regard as a national calamity.

During 1878 the amount of grain converted into flour in Hungary was 4,147,616 metrical quintals, being largely in excess of any former year. In the previous year the quantity was 3,781,424 metrical quintals. The first half of the year 1879 shows an additional augmentation of 11 per cent. when compared with the like period of 1878, which indicates unmistakably that there is no immediate danger of Hungary suffering in her flour industry.

*Change of tariff of entry duties.*—Considerable pressure is being brought by those interested parties to induce the Reichsrath to place a duty, or increase the same where already it exists, on certain articles of American production that are likely to come into competition with their home manufactures or productions. The large and increasing annual deficit in the budget may compel the government to accede to the proposition. The several articles that would probably suffer from such action would be meats, grain, and petroleum. Great opposition has been made against the introduction of American hams and salted meats, in the form of unfair representations, in the press and otherwise, that they were so generally affected with the trichinæ that the authorities should prohibit their importation. It is furthermore held that a tax on petroleum would be paid without being felt by the consumer, and thereby a large revenue would accrue to the government. As previously stated, the entry duty on canned fruits, fish, and meats, is already so large that it amounts to prohibition.

*Increased commercial facilities.*—In view of the above, there is not much encouragement for the establishment of a more direct line of communication between this country and the United States. Attention has been called to the feasibility of opening up a new line of steamers or sailing vessels with Triest, bringing American productions eastward, and returning with fruits from the Adriatic and Mediterranean. The freights are so high between this city and either seaboard that the transportation of most heavy articles is too expensive to warrant a paying margin except for a limited number of articles; for these, there may be an economy in shipping by Triest, especially if Germany should finally persist in collecting a transit duty.

*Railroad communication via Switzerland.*—In view of the possibility of such a project, the merchants are urging the completion of the railway that will put Austria in direct connection, via the Tyrol, the Swiss lakes, and system of railroads, with the French and Belgian ports. As long, however, as Germany and Austria are in friendly accord, politically and commercially, such an outlet for the central province of Austria could hardly be of great utility.

JAMES RILEY WEAVER.

CONSULATE-GENERAL OF THE UNITED STATES,  
Vienna, December 23, 1879.

## I.—Statement showing the quantities and values of the principal imports and exports of Austria-Hungary, for the year 1878.

Articles.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
<b>Tropical products:</b>		<i>Florins.</i>		<i>Florins.</i>
Cocoa.....met. cent..	3, 166	273, 042		
Coffee.....do.....	458, 948	45, 361, 812	2, 937	70, 488
Spices.....do.....	45, 439	3, 230, 751	219	22, 578
Sago, tapioca, arrow-root.....do.....	730	19, 852		
Tropical fruits.....do.....	285, 170	6, 062, 114	4, 941	66, 177
Tea.....do.....	5, 457	1, 637, 100		
Sugar.....do.....	10, 114	245, 311	1, 593, 700	49, 955, 952
<b>Tobacco:</b>				
Raw.....met. cent..	117, 992	8, 849, 400	35, 204	1, 056, 120
Manufactured.....do.....	23, 852	15, 872, 240	16, 763	10, 393, 060
<b>Field and garden products:</b>				
Vegetables and fruits.....met. cent..	466, 359	2, 996, 784	541, 682	4, 207, 070
Wheat.....do.....	1, 439, 676		3, 552, 951	
Rye.....do.....	553, 759		435, 835	
Indian corn.....do.....	2, 037, 298	41, 211, 513	373, 294	112, 399, 454
Barley and oats.....do.....	623, 117		4, 257, 806	
Millet, spelt, beans, &c.....do.....	123, 510		433, 242	
Rice.....do.....	383, 886	6, 658, 040	1, 440	27, 408
Flour.....do.....	478, 551	8, 659, 848	2, 285, 981	54, 816, 546
Hops.....do.....	16, 496	3, 711, 690	15, 436	2, 778, 480
Oilseed.....do.....	161, 093	2, 097, 416	767, 809	12, 401, 217
Garden seeds.....do.....	89, 757	2, 583, 540	92, 043	5, 058, 771
<b>Animals:</b>				
Fish, fresh and salted.....met. cent..	97, 065	2, 726, 036	9, 270	552, 496
Oxen.....number.....	62, 476	7, 850, 450	82, 170	20, 542, 509
Cows.....do.....	14, 534	1, 380, 260	45, 973	7, 991, 840
Calves.....do.....	14, 495	376, 870	53, 977	1, 349, 425
Sheep and goats.....do.....	83, 617	745, 050	410, 411	5, 713, 418
Lambs.....do.....	8, 506	20, 678	33, 076	121, 637
Hogs.....do.....	462, 505	13, 989, 125	230, 729	11, 305, 721
Pigs.....do.....	33, 581	167, 905	28, 567	142, 835
Horses.....do.....	6, 098	1, 754, 100	20, 693	7, 850, 480
Mules and asses.....do.....	399	22, 743	253	15, 686
Leeches.....met. cent..	179	143, 200	183	146, 400
<b>Animal products:</b>				
Skins, hides, and furs.....met. cent..	94, 812	16, 217, 554	24, 672	5, 703, 350
Hair and bristles.....do.....	6, 675	1, 905, 000	2, 576	517, 740
Feathers.....do.....	2, 393	2, 394, 765	22, 408	6, 206, 660
Meat and sausages.....do.....	4, 254	315, 943	10, 805	706, 817
Honey.....do.....	963	28, 950	3, 076	104, 584
Wax.....do.....	1, 263	202, 080	6, 031	639, 286
Cheese.....do.....	14, 500	1, 081, 880	12, 246	734, 760
Eggs, milk, &c.....do.....	30, 410	645, 824	314, 998	6, 220, 008
Other products.....do.....	3, 556	507, 600	5, 474	832, 043
<b>Lard and oil:</b>				
Butter, lard, tallow, grease, &c.....met. cent..	59, 587		83, 375	
Fish oil and others.....do.....	31, 980	7, 748, 657		7, 616, 872
Grease, not perfumed.....do.....	57, 257		20, 004	
Olive oil.....do.....	124, 662		5, 102	
Cocoonut and palm oil.....do.....	41, 627	12, 380, 840		1, 291, 630
Linseed and other oils.....do.....	91, 647		19, 219	
<b>Edibles and beverages:</b>				
Beer.....met. cent..	3, 193	58, 490	331, 179	4, 379, 127
Vinegar.....do.....	2, 406	20, 592	2, 420	20, 344
Alcoholic liquids.....do.....	15, 576	1, 655, 420	170, 097	4, 915, 199
Wine and grapes.....do.....	85, 452	1, 796, 857	239, 811	5, 953, 512
Edibles, ordinary.....do.....	66, 253		14, 393	
Edibles, fine.....do.....	5, 943	2, 166, 685	3, 968	611, 835
<b>Fuel and building material:</b>				
Firewood.....cub. met..	104, 404	261, 011	254, 119	686, 124
Timber, ordinary.....do.....	209, 126	2, 509, 512	2, 138, 784	38, 498, 112
Timber, foreign.....met. cent..	8, 317	249, 510	139, 42	1, 360
Charcoal.....do.....	9, 492	18, 984	139, 038	305, 884
Coal.....do.....	16, 596, 405	6, 683, 562	29, 008, 326	10, 733, 081
Turners' material.....do.....	125, 664	9, 084, 454		
Minerals.....do.....	750, 009	1, 765, 534	930, 381	2, 337, 237
<b>Medicines, perfumes, and dye-stuffs:</b>				
Drugs.....met. cent..	4, 186	1, 306, 990	434	303, 800
Dyeing and tanning materials.....do.....	338, 079	12, 645, 713	355, 990	2, 248, 747
Tar, resin, and gum.....do.....	1, 297, 804	21, 389, 918	60, 906	801, 362
Salt.....do.....	255, 517	229, 859	285, 249	855, 747
Chemicals.....do.....	440, 198	5, 782, 929	214, 145	4, 573, 477
<b>Metals, raw and manufactured:</b>				
Ore.....met. cent..	20, 475	18, 046	166, 717	472, 410
Lead.....do.....	22, 907	501, 932	17, 120	455, 337

## I.—Statement showing the quantities and values of the principal imports and exports of Austria-Hungary, &amp;c.—Continued.

Articles.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
<b>Metals, raw and manufactured:</b>				
Iron.....met. cent.	705,583	3,480,005	52,640	3,865,648
Iron rails.....do.	23,344		131,488	
Steel, all kinds.....do.	7,635		47,160	
Sheet-iron, steel plates, wire, plowshares, anchors, and chains.....met. cent.	42,022		53,774	
Cast-iron.....do.	20,184		12,564	
Quicksilver.....do.	2,434	681,520	3,211	899,080
Zinc.....do.	67,440	1,677,025	13,896	400,890
Copper, brass, tin, &c.....do.	57,229	5,002,746	9,375	1,108,515
<b>Weaving material:</b>				
Cotton.....met. cent.	523,364	29,305,051	502	17,570
Flax, hemp, and sea-weed.....do.	310,126	12,429,336	35,706	1,820,676
Wool.....do.	186,372	34,883,820	82,808	18,521,800
Silk.....do.	11,206	15,517,080	8,407	8,265,510
<b>Yarn:</b>				
Cotton yarn.....met. cent.	147,668	21,542,547	7,024	935,546
Linen yarn.....do.	18,766	2,880,212	85,302	7,431,278
Woolen yarn.....do.	35,711	12,377,185	17,894	6,133,655
<b>Textile fabrics:</b>				
Cotton goods.....met. cent.	10,075	4,809,587	30,951	7,415,627
Linen goods.....do.	102,191	6,524,614	52,515	10,290,062
Woolen goods.....do.	37,291	22,076,180	42,661	24,591,640
Silk goods.....do.	4,416	18,295,600	1,457	3,337,000
Wax and oil-cloth.....do.	4,930	1,394,836	640	162,480
Clothing.....do.	1,895	7,097,560	15,898	16,283,260
Hats and caps of straw, with trimming.....No.	25,167	88,084	1,194	4,179
<b>Paper and straw goods:</b>				
Brushes and sieves.....met. cent.	874	358,340	1,332	284,800
Straw, cane, and grass goods.....do.	10,599	1,703,689	3,610	802,915
Paper.....do.	53,279	1,360,312	177,074	7,201,185
Paper goods.....do.	7,494	1,336,290	17,843	3,575,540
Hats and caps of straw without trimming.....number.	251,375	547,576	5,389	10,966
<b>Leather and furs:</b>				
Furs.....met. cent.	145	70,320	299	177,280
Leather and India-rubber goods.....do.	97,051	19,558,475	13,398	2,890,600
Gloves.....do.	4,313	2,653,540	22,170	16,801,270
<b>Wooden, glass, and earthen ware:</b>				
Boneware.....met. cent.	1,192	1,167,200	5,156	5,672,500
Woodenware.....do.	64,559	4,313,243	264,069	11,019,318
Glassware.....do.	79,166	1,823,161	265,913	11,550,400
Stoneware.....do.	4,953	4,456,810	5,191	188,329
Earthenware.....do.	62,287	1,212,191	70,218	2,579,270
<b>Hardware:</b>				
Leadware.....met. cent.	178	10,058	170	8,330
Ironware.....do.	59,694	5,652,092	157,824	16,915,648
Arms.....do.	10,312		21,330	
Sewing-needles.....do.	393		4	
Hardware.....do.	7,129	2,665,158	12,201	2,175,925
<b>Vehicles of transportation:</b>				
Ships and boats.....tons.	1,077	35,043	161,954	4,547,736
Wagons and sleighs.....number.	440	84,820	3,350	727,030
Railway cars.....do.			2,517	3,700,050
<b>Instruments, machines, &amp;c.:</b>				
Instruments.....met. cent.	2,561	1,447,250	3,437	2,669,336
Machines and parts of.....do.	193,951	8,360,171	133,475	6,749,422
Fancy goods.....do.	2,179	10,953,791	34,713	48,106,900
<b>Chemicals and colors:</b>				
Chemicals, colors, &c.....met. cent.	65,414	6,219,282	56,698	5,391,408
Candles and soap.....do.	8,438	340,253	13,379	985,090
Matches.....do.	5,774	340,560	50,218	2,391,088
<b>Objects of art and literature:</b>				
Books, charts, &c.....met. cent.	26,143	7,989,600	9,745	2,945,250
Engravings.....do.	1,574	1,590,800	1,397	1,409,600
Pictures.....do.	1,240	1,880,000	2,768	4,152,000
<b>Refuse:</b>				
Manure.....met. cent.	1,828	2,742	6,082	18,246
Oil-cake.....do.	4,135	37,215	143,556	1,112,559
Rags.....do.	37,882	518,020	30,721	348,962
Bonedust, horns, and claws.....do.	59,809	602,677	122,057	1,896,985
Others.....do.		163,290		
<b>Total</b>		579,547,828		698,302,513

II.—Statement showing the values of the imports and exports of the Empire of Austria-Hungary, and duties collected thereon, for the years 1878 and 1877, in Austrian florins.

## IMPORTS.

Articles.	1878.	1877.	Customs duties, 1878.	Customs duties, 1877.
	<i>Florins.</i>	<i>Florins.</i>	<i>Florins.</i>	<i>Florins.</i>
Tropical products.....	56,830,055	47,976,862	9,132,769	7,691,817
Tobacco, raw and manufactured.....	24,721,640	21,536,455	14,773	9,292
Field and garden products.....	67,918,741	69,860,093	454,569	423,318
Animals.....	28,126,417	45,640,795	895,081	1,336,981
Animal products.....	23,269,596	23,130,335	104,574	103,697
Lard and oil.....	26,129,497	21,128,953	665,623	582,714
Edibles and beverages.....	5,668,044	4,628,463	759,759	657,888
Fuel and building material.....	20,572,567	19,444,728	16,247	15,817
Drugs, perfumes, and dye-stuffs.....	41,355,409	39,537,038	2,048,391	2,020,239
Metals, raw and manufactured.....	11,270,274	9,761,185	692,340	494,982
Weaving material.....	92,135,287	94,539,383	22,674	23,607
Yarns.....	36,799,944	33,696,796	1,510,593	1,400,290
Textile fabrics.....	60,286,461	48,823,723	3,766,292	2,850,603
Paper and straw goods.....	5,306,207	4,301,024	143,413	124,361
Leather, skins, and furs.....	22,282,335	17,312,055	561,299	415,922
Wooden, glass, and earthen ware.....	13,135,822	10,575,704	253,490	233,578
Hardware.....	8,327,308	6,896,483	474,840	407,858
Vehicles of transportation.....	119,863	122,564	4,446	4,440
Instruments, machines, &c.....	20,761,212	17,761,126	713,657	589,298
Chemicals, colors, &c.....	6,900,095	6,175,994	330,459	296,862
Objects of art and literature.....	11,440,400	11,458,550	1,536	1,610
Refuse.....	1,160,654	1,219,739		
Total.....	579,847,828	555,227,048	22,570,985	19,665,194

## EXPORTS.

Articles.	1878.	1877.
	<i>Florins.</i>	<i>Florins.</i>
Tropical products.....	50,115,195	41,670,843
Tobacco, raw and manufactured.....	11,449,180	13,461,670
Field and garden products.....	191,688,946	180,880,708
Animals.....	55,732,438	76,669,090
Animal products.....	21,665,253	22,206,894
Lard and oil.....	8,908,502	8,890,227
Edibles and beverages.....	15,890,067	13,889,082
Fuel and building material.....	52,561,698	54,183,267
Drugs, perfumes, and dye-stuffs.....	8,883,133	8,462,840
Metals, raw and manufactured.....	7,201,880	9,030,130
Weaving material.....	28,625,556	33,141,852
Yarns.....	14,500,479	11,470,530
Textile fabrics.....	62,084,248	52,242,653
Paper and straw goods.....	11,875,406	10,400,331
Leather, skins, and furs.....	19,869,150	16,586,360
Wooden, glass, and earthen ware.....	31,009,817	30,176,851
Hardware.....	19,099,908	13,760,035
Vehicles of transportation.....	8,974,816	3,807,208
Instruments, machines, &c.....	57,525,658	41,377,300
Chemicals, colors, &c.....	8,767,586	7,900,628
Objects of art and literature.....	8,506,850	8,580,950
Refuse.....	3,376,752	3,262,820
Total.....	698,302,513	662,032,209

The duties collected on goods exported amounted in 1878 to 137,576 florins; in 1877 to 178,835 florins.

III.—Statement showing the value of the declared exports from the consular districts of Austria-Hungary (agencies included) to the United States of America, during the year ending September 30, 1879.

Articles.	Buda Pesth.	Prague.	Triest.	Vienna.	Total 1879.
Bed feathers.....		\$2,573 20			\$2,573 20
Books.....		3,322 02			3,322 02
Buttons.....		30,918 94		\$995,474 74	1,026,393 68
Cigar ribbons.....				7,145 17	7,145 17
Cloth and woolen goods.....		43,618 13		104,839 87	148,557 80

## III.—Statement showing the value of declared exports, &amp;c.—Continued.

Articles.	Buda Pesth.	Prague.	Triest.	Vienna.	Total 1879.
Dress goods				\$30,192 01	\$30,192 01
Drugs and chemicals	\$124 50	\$37,020 49	\$91,249 52	80,808 03	203,202 54
Fancy goods and toys		10,779 46		157,018 38	167,797 84
Fruits, dried	124,761 97	4,774 68	605,202 74	24,754 42	750,493 81
Furniture				8,598 66	8,598 66
Glass and china ware		509,917 89		1,633 39	511,551 28
Gloves		40,417 58		90,854 59	131,272 17
Glycerine	801 92			2,147 09	3,549 01
Gum			187,653 46		187,653 46
Hops		19,773 65			19,773 65
Leather, skins, and furs			33,296 91	92,983 66	126,280 57
Linen and cotton goods		8,435 02		197,543 37	205,978 39
Machinery	6,395 59				6,395 57
Mineral water	24,873 94	8,711 29			33,585 23
Musical instruments		2,775 31		71,187 94	73,963 25
Oils			5,884 41		5,884 41
Pipes and pipe fixtures				95,880 29	95,880 29
Rags			22,494 09		22,494 09
Seeds	41 50		64,263 07		64,304 57
Silks and velvets		5,275 53		36,883 56	42,159 09
Sponges			19,500 38		19,500 38
Wines and liquors	8,855 70	14,040 37		8,923 54	31,819 61
Miscellaneous		7,046 73	91,364 69	32,967 81	131,369 23
Total in United States gold	165,855 10	743,450 29	1,120,909 27	2,040,527 22	4,070,691 88
Total for the preceding year		500,112 81	762,166 39	2,437,702 29	3,699,981 49
Increase	165,855 10	243,287 48	358,742 88		379,710 39
Decrease				397,175 07	

## IV.—Statement showing the number of sea-going vessels entered at and cleared from the several Austrian ports during the year 1878.

Ports.	ENTERED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
District of—						
Triest	14,424	457,563	3,659	979,795	18,083	1,437,358
Rovigno	3,051	74,235	3,621	395,452	6,672	469,687
Pola	2,770	79,249	1,845	325,617	4,615	404,866
Lussinpiccolo	2,942	99,243	1,031	292,974	3,973	392,217
Zara	3,048	81,618	1,405	562,749	4,453	644,367
Spalato	5,241	130,948	1,692	729,955	6,933	860,903
Ragusa	3,029	90,180	1,368	448,385	4,397	538,565
Meglino	487	24,481	419	219,378	906	243,859
Total	34,992	1,037,517	15,040	3,954,305	50,032	4,991,822

Ports.	CLEARED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
District of—						
Triest	14,556	460,680	3,669	980,286	18,225	1,440,966
Rovigno	3,036	73,911	3,621	395,479	6,657	469,390
Pola	2,797	80,127	1,845	325,617	4,642	405,744
Lussinpiccolo	3,044	104,670	1,031	292,974	4,075	397,644
Zara	3,023	79,971	1,405	561,879	4,428	641,850
Spalato	5,211	130,017	1,692	729,955	6,903	859,972
Ragusa	2,932	90,928	1,368	448,385	4,300	539,313
Meglino	485	24,362	419	218,778	904	243,140
Total	35,084	1,044,666	15,050	3,953,353	50,134	4,998,019



V.—Statement showing number, tonnage, and nationality of vessels entered at and cleared from the Austrian ports during 1878.

Nationality.	ENTERED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Austrian.....	26,912	666,413	14,493	3,575,265	41,405	4,241,708
Belgian.....	1	142	1	398	2	540
British.....	46	11,642	197	195,572	243	207,214
Danish.....	12	1,982			12	1,982
Dutch.....	32	5,759			32	5,759
French.....	2	418	2	348	4	766
German.....	21	4,920	2	1,872	23	6,792
Greek.....	775	52,880	7	5,683	782	58,563
Italian.....	6,885	260,826	334	172,666	7,219	433,492
Russian.....	2	727	1	650	3	1,377
Samotic.....	5	588			5	588
Servian.....	2	146			2	146
Spanish.....	2	704	1	535	3	1,239
Swedish.....	47	17,375	2	1,316	49	18,691
Turkish.....	239	7,879			239	7,879
United States.....	9	5,086			9	5,086
Total.....	34,992	1,037,517	15,040	3,954,305	50,032	4,991,822

Nationality.	CLEARED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Austrian.....	27,020	678,357	14,500	3,575,379	41,520	4,253,736
Belgian.....	1	142	1	398	2	540
British.....	47	12,266	196	193,224	243	205,490
Danish.....	14	2,229			14	2,229
Dutch.....	28	5,011			28	5,011
French.....	2	443	1	289	3	732
German.....	20	4,226	2	1,872	22	6,098
Greek.....	780	54,306	7	6,042	787	60,348
Italian.....	6,873	257,577	337	172,991	7,210	430,568
Russian.....			3	1,307	3	1,307
Samotic.....	8	801			8	801
Servian.....	2	146			2	146
Spanish.....	2	775	1	535	3	1,301
Swedish.....	42	14,699	2	1,316	44	16,015
Turkish.....	234	7,975			234	7,975
United States.....	11	5,743			11	5,713
Total.....	35,084	1,044,666	15,050	3,953,353	50,134	4,998,019

VI.—Statement showing number and tonnage of vessels composing the mercantile marine of Austria-Hungary on December 30, 1878.

Classes of vessels.	Sea-going vessels.			Large coasting vessels.		
	No.	Tons.	Crew.	No.	Tons.	Crew.
Ships.....	10	9,163	144			
Barks.....	296	155,723	3,231	2	821	23
Brigs.....	79	28,177	729	1	318	12
Brigantines.....	38	11,523	317	3	486	22
Goelettes.....				2	227	11
Schooners.....	63	17,922	455	34	3,700	185
Cutters.....						
Fishing-boats.....						
Lighters.....						
Other small craft.....				23	1,015	104
Steamers.....	70	56,381	2,162	7	622	68
Total.....	556	278,889	7,038	72	7,189	425

## VI.—Statement showing number and tonnage of vessels, &amp;c.—Continued.

Classes of vessels.	Small coasting vessels, fishing boats, etc.			Total.		
	No.	Tons.	Crew.	No.	Tons.	Crew.
Ships .....				10	9,163	114
Barks .....				298	156,544	3,254
Brigs .....				80	28,495	741
Brigantines .....				41	12,009	339
Goelettes .....	1	39	4	3	266	15
Schooners .....	9	519	41	106	22,141	681
Cutters .....	9	115	22	9	115	22
Fishing-boats .....	2,184	6,397	8,544	2,184	6,397	8,544
Lighters .....	3,213	8,109	7,272	3,213	8,109	7,272
Other small craft .....	1,825	25,774	5,292	1,848	26,789	5,396
Steamers .....	18	698	114	95	57,701	2,344
<b>Total .....</b>	<b>7,250</b>	<b>41,651</b>	<b>21,289</b>	<b>7,887</b>	<b>327,729</b>	<b>28,752</b>

## VII.—Table showing the carrying trade of the mercantile marine of Austria-Hungary with the several foreign countries during the year 1879.

Countries.	ENTERED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Argentine Republic .....	6	2,071			6	2,071
Belgium .....	18	7,438	2	2,093	20	9,531
Brazil .....	13	3,646			13	3,646
Egypt .....	87	33,524	208	262,604	295	296,128
France and its colonies .....	356	125,419	1	1,080	357	126,499
Germany .....	11	4,850			11	4,850
Great Britain and its colonies .....	845	415,710	16	14,044	861	429,754
Greece .....	129	26,854	1,171	895,943	1,300	922,797
Holland .....	6	2,486			6	2,486
Italy .....	787	95,754	576	300,679	1,363	396,433
Portugal .....	1	203			1	203
Roumania .....	3	470	65	24,813	68	25,283
Russia .....	10	4,246	20	18,326	30	22,572
Spain .....	44	13,636			44	13,636
Tripoli .....	1	256	4	1,481	5	1,737
Tunis .....	13	1,117			13	1,117
Turkey .....	352	90,206	1,836	1,628,622	2,188	1,718,828
United States .....	182	105,348			182	105,348
<b>Total .....</b>	<b>2,864</b>	<b>933,234</b>	<b>3,899</b>	<b>3,149,685</b>	<b>6,763</b>	<b>4,082,919</b>

Countries.	CLEARED.					
	Sailing vessels.		Steamers.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Argentine Republic .....	2	720			2	720
Belgium .....	19	7,408	2	2,093	21	9,501
Brazil .....	13	3,646			13	3,646
Egypt .....	87	33,776	208	262,775	295	296,551
France and its colonies .....	351	122,739	1	1,080	352	123,819
Germany .....	12	5,400			12	5,400
Great Britain and its colonies .....	833	409,835	16	14,044	849	422,879
Greece .....	123	24,403	1,171	895,943	1,294	920,346
Holland .....	6	2,486			6	2,486
Italy .....	779	92,224	577	301,133	1,356	393,357
Portugal .....	1	203			1	203
Roumania .....	3	470	65	24,813	68	25,283
Russia .....	14	6,461	20	18,326	34	24,787
Spain .....	39	12,345			39	12,345
Tripoli .....	1	256	4	1,481	5	1,737
Tunis .....	13	1,117			13	1,117
Turkey .....	340	87,082	1,833	1,625,407	2,173	1,712,489
United States .....	187	108,705			187	108,705
<b>Total .....</b>	<b>2,823</b>	<b>919,276</b>	<b>3,897</b>	<b>3,147,095</b>	<b>6,720</b>	<b>4,066,871</b>

## VIII.—Statement showing the amount of business transacted by the Post-Office Department of Austria-Hungary during the year 1877.

## 1.—LETTERS.

Provinces.	Letters.		Postal cards.		Printed mat- ter.	Samples.	Total.	Included in the foregoing.	
	Prepaid.	Unpaid.	Exempt from postage.	International traffic.				Registered.	
				Number.	Number.	Number.	Number.		Number.
Lower Austria .....	48,028,900	1,162,100	3,376,640	9,220,300	8,176,940	913,420	70,873,300	20,929,100	4,043,500
Upper Austria .....	6,111,900	135,000	968,050	1,074,600	743,100	114,800	9,148,050	536,350	447,903
Salzburg .....	1,043,500	32,800	323,790	326,000	477,600	40,000	2,863,680	1,087,180	136,279
Styria .....	10,697,100	197,800	2,046,700	1,714,300	1,097,000	464,500	16,127,400	1,070,400	762,525
Carinthia .....	4,274,100	54,000	971,280	487,900	495,500	112,500	6,395,800	191,800	252,757
Carniola .....	2,290,300	98,500	416,700	456,000	463,300	92,800	3,818,300	606,500	200,706
Illyria .....	7,819,500	300,900	1,124,000	780,900	1,598,200	340,600	11,315,400	4,746,800	400,808
Tyrol and Vorarlberg .....	6,365,200	199,400	1,134,000	888,500	1,177,300	202,770	9,664,170	3,666,070	380,432
Bohemia .....	45,984,000	1,080,000	6,074,400	9,154,000	6,365,200	1,201,900	28,661,500	21,928,800	4,172,010
Moravia .....	18,432,900	459,300	2,695,400	2,524,400	1,996,500	510,100	28,618,600	10,137,700	1,864,798
Silesia .....	4,173,300	104,440	811,500	645,200	614,870	143,900	6,493,210	2,207,010	474,052
Galicia .....	13,501,200	623,400	8,758,090	3,402,700	1,313,300	339,800	22,936,590	3,410,180	1,755,068
Bakowina .....	1,495,200	80,300	638,600	366,500	121,700	41,500	2,763,800	589,300	244,838
Dalmatia .....	2,425,200	395,200	770,500	108,500	29,900	106,800	3,896,100	548,900	382,300
Hungary .....	47,991,670	1,571,618	13,487,844	10,043,658	7,744,718	1,443,232	82,282,740	4,838,316	5,019,790
Total.....	221,229,070	6,515,958	34,955,614	41,190,058	32,325,128	6,068,822	345,290,650	76,481,626	20,520,364

## 2.—PACKAGES.

Provinces.	Ordinary packages.		Money letters.		Packages containing valuable articles.		Total.	
	Number.	Kilograms.	Number.	Florins.	Number.	Florins.	Number.	Florins.
Lower Austria .....	513,900	2,037,500	2,370,100	704,240,400	2,835,100	299,384,600	5,219,100	1,003,625,000
Upper Austria .....	144,000	315,400	680,200	93,764,500	376,000	81,946,500	1,150,200	129,714,000
Salzburg .....	40,000	81,000	105,600	15,662,500	98,700	5,909,900	244,300	21,472,400
Styria .....	429,400	814,300	490,200	103,029,700	928,300	39,760,000	1,847,900	142,780,700
Carinthia .....	102,500	291,500	139,900	27,098,200	486,400	11,145,000	1,488,900	88,243,600
Carniola .....	41,240	133,070	165,740	27,323,100	126,940	28,025,500	338,920	55,348,600
Illyria .....	92,900	349,900	270,300	62,674,900	134,000	42,447,100	497,100	105,122,000
Tyrol and Vorarlberg .....	223,700	661,500	471,100	80,567,200	257,600	11,492,800	952,400	92,060,000

Bohemia.....	964,000	3,331,500	2,563,400	855,464,200	3,756,500	452,077,500	7,313,900	1,307,542,000
Moravia.....	504,100	1,556,600	1,541,100	292,980,200	871,500	38,434,000	3,006,700	3,321,414,200
Silesia.....	153,500	527,500	290,100	74,851,700	217,900	23,206,500	697,500	96,058,200
Galicia.....	287,600	992,800	1,102,300	446,078,600	1,107,100	55,483,200	2,497,000	501,561,800
Bukowina.....	38,100	96,500	177,900	32,132,400	62,600	13,979,000	278,600	46,111,400
Dalmatia.....	63,100	409,500	(*)	(*)	165,300	40,239,400	238,400	40,239,400
Hungary.....	347,700	1,028,018	(*)	(*)	6,148,180	838,701,318	6,495,880	1,094,562,318
Total.....	4,095,640	12,629,588	10,347,940	2,805,758,600	16,832,120	1,832,235,618	31,213,700	4,993,855,218

## 3.—INTERNATIONAL TRAFFIC.

Lower Austria.....	231,000	1,166,500	242,600	112,706,000	399,800	84,766,700	873,400	197,472,700
Upper Austria.....	26,400	53,100	34,600	5,532,400	13,300	3,333,200	74,300	8,856,600
Salzburg.....	13,000	22,800	13,400	1,215,600	4,700	1,611,900	31,100	2,828,500
Styria.....	35,200	43,700	44,000	2,750,100	84,600	1,243,100	184,200	3,866,200
Carinthia.....	8,900	14,300	18,000	6,031,900	27,600	2,098,900	55,400	1,260,400
Carniola.....	9,140	41,070	6,540	6,031,900	50,240	2,031,700	35,820	8,062,700
Tyrol.....	46,900	201,500	68,500	16,738,600	27,200	3,267,800	136,600	13,974,400
Tyrol and Vorarlberg.....	99,400	267,000	106,500	22,512,100	41,300	3,674,800	237,200	26,186,900
Bohemia.....	374,600	1,466,900	242,800	67,194,100	601,100	66,013,000	1,378,600	153,207,700
Moravia.....	208,100	591,600	530,800	73,468,600	82,900	3,465,100	831,900	84,961,700
Silesia.....	51,100	193,400	163,000	22,680,600	34,100	3,334,200	188,200	26,014,800
Galicia.....	72,200	558,200	121,800	37,800,000	95,800	11,483,200	289,900	49,283,200
Bukowina.....	7,400	28,400	43,300	7,397,200	8,100	4,147,300	58,800	11,544,500
Dalmatia.....	10,800	64,500	(*)	(*)	37,600	1,399,400	46,400	1,399,400
Hungary.....	85,560	365,202	(*)	(*)	125,940	41,088,070	211,320	42,063,272
Total.....	1,209,520	5,003,172	1,674,440	397,926,100	1,674,280	233,721,670	4,618,240	631,112,972

\* The money letters are included in the packages containing valuables.

IX.—Statement showing the amount of business transacted by the telegraph-offices of Austria-Hungary during the year 1878.

Countries.	Telegrams and dispatches.								
	Official.		Private.		Total.	Arrived from foreign countries.	Sent off from the railway depots.	Total number requiring payment.	Receipts in florins.
	Interior.	Foreign.	Interior.	Foreign.					
Lower Austria.....	20,253	5,002	833,620	276,631	1,110,251	260,683	43,976	1,440,165	1,060,653
Upper Austria.....	2,000	88	91,889	10,602	102,491	12,131	13,902	130,612	80,352
Salzburg.....	538	284	30,070	5,952	36,022	6,983	6,189	50,016	21,673
Styria.....	4,271	118	176,655	7,412	184,067	9,603	28,759	226,818	104,000
Carinthia.....	842	5	48,277	1,738	50,015	2,104	6,806	59,772	25,682
Carntola.....	949	16	35,787	1,077	36,864	1,415	4,102	43,346	18,981
Illyria.....	6,109	327	196,377	78,962	275,339	76,333	4,598	362,706	297,799
Tyrol and Vorarlberg.....	2,653	124	89,255	28,913	118,168	30,080	14,267	165,292	77,544
Bohemia.....	19,755	542	756,674	105,655	862,329	120,132	97,461	1,100,219	406,062
Moravia.....	3,138	147	236,372	18,066	254,438	20,701	21,277	299,701	137,830
Silesia.....	266	75	71,420	9,255	80,675	8,870	3,176	93,062	42,525
Galicia.....	4,271	94	403,580	48,048	451,628	57,794	28,460	542,247	263,048
Bukowina.....	843	38	66,186	15,824	82,010	16,873	4,834	104,598	47,508
Dalmatia.....	35,281	3,062	173,825	12,164	185,989	15,918	.....	240,250	107,650
Total in 1878.....	101,169	9,922	3,209,987	620,290	3,830,286	639,620	277,807	4,858,804	2,761,287
Total in 1877.....	60,224	8,804	3,124,612	638,608	3,763,220	643,381	268,731	4,744,360	2,865,008

Statement showing the value of the declared exports from the consular districts of Austria-Hungary (agencies included) to the United States of America during the year ending September 30, 1879.

Articles.	Buda-Pesth.	Prague.	Triest.	Vienna.	Total.
Bed-feathers.....	.....	\$3,322 02	.....	.....	\$3,322 02
Books.....	.....	2,573 20	.....	.....	2,573 20
Buttons.....	.....	30,918 94	.....	\$995,474 74	1,026,393 68
Cigar-ribbons.....	.....	.....	.....	7,145 17	7,145 17
Cloth and woolen goods.....	.....	43,618 13	.....	104,939 67	148,557 80
Dress-goods.....	.....	.....	.....	30,192 91	30,192 91
Drugs and chemicals.....	\$124 50	31,020 49	\$91,249 52	80,808 03	203,292 54
Fancy goods and toys.....	.....	10,779 46	.....	157,018 38	167,797 84
Fruits, dried.....	124,761 97	4,774 68	605,202 74	24,754 42	759,493 81
Furniture.....	.....	.....	.....	8,598 66	8,598 66
Glass and china ware.....	.....	509,917 89	.....	1,633 39	511,551 28
Gloves.....	.....	40,417 58	.....	90,854 59	131,272 17
Glycerine.....	801 92	.....	.....	2,747 09	3,549 01
Gum.....	.....	.....	187,653 46	.....	187,653 46
Hops.....	.....	10,773 65	.....	.....	10,773 65
Leather, skins, and furs.....	.....	.....	33,296 91	92,983 66	126,280 57
Linen and cotton goods.....	.....	8,435 02	.....	197,543 37	205,978 39
Machinery.....	6,395 59	.....	.....	.....	6,395 59
Mineral water.....	24,873 94	8,711 29	.....	.....	33,585 23
Musical instruments.....	.....	2,775 31	.....	71,187 94	73,963 25
Oils.....	.....	.....	5,884 41	.....	5,884 41
Pipes and pipe-fixtures.....	.....	.....	.....	95,880 29	95,880 29
Rags.....	.....	.....	22,494 09	.....	22,494 09
Seeds.....	41 50	.....	64,263 07	.....	64,304 57
Silks and velvets.....	.....	.....	19,500 38	.....	19,500 38
Sponges.....	.....	5,275 53	.....	36,883 56	42,159 09
Wine and liquor.....	8,855 70	14,040 37	.....	8,923 54	31,819 61
Miscellaneous.....	.....	7,046 73	91,364 69	32,957 81	131,369 23
Total in United States gold.....	165,855 10	743,400 29	1,120,909 27	2,040,527 22	4,070,691 88
Total for preceding year.....	.....	500,112 81	762,166 39	2,437,702 29	3,699,981 49
Increase.....	*165,855 10	243,287 48	358,742 88	.....	370,710 39
Decrease.....	.....	.....	.....	397,175 07	.....

\* No consulate established at Buda-Pesth until December, 1878. Amounts for preceding year were embraced in the totals from Vienna.

## GREECE.

*Report, by Consul Hancock, of Patras, on the trade and commerce of Greece during the year 1879.*

## TRADE WITH THE UNITED STATES.

*Imports.*—Although it is well known that many articles, such as sewing-machines, clocks, pumps, arms, &c., are received by Greece from the United States, through their being received indirectly it is almost impossible to ascertain the quantity and their value. Petroleum is the only commodity that is received direct, and notwithstanding that the Greek Government has increased the import duty, within the past six months, from 22 to 35 cents of a drachma per oke, its consumption throughout the country seems steadily on the increase, although here (Patras) there is a falling off. A gas company having lately been started, probably importers were frightened that it would interfere with the consumption—and, of course, to a certain extent it must do so—and did not order as hithereof. But gas here is dearer than petroleum, and therefore a certain quantity will always be required. The quantities received have been as follows:

At Patras, 2,502 cases, value about \$3,503; at Corfu, 60,786 cases, value about \$88,617; at Piræus, 68,600 cases, value about \$96,040; at Syra, 48,266 cases, value about \$62,802. Total, 180,154 cases, valued about \$250,962, against 160,907 cases received during 1878, and 132,060 cases during 1877.

*Exports.*—The invoices certified here, and the agencies attached to this consulate, show the following as the value of goods sent direct to the United States during the year 1879:

From Patras .....	\$465,932 64
From Cephalonia .....	169,762 50
From Zante .....	50,557 68
From Corfu .....	5,938 58
From Syra .....	897 58
Total .....	693,088 98

Consisting of 9,112 tons of currants, costing \$684,273.07; olive-oil soap, \$1,655.89; wine, \$323.86; goat-skins, 118 bales, \$5,938.58; manufactured tobacco, \$897.58. Total, \$693,088.98.

The total value for 1878 was \$543,666.91, and for the previous year \$635,208.36.

The principal shipments of currants were made early in the autumn, the average cost per ton being \$75.10 on board ship, which is considerably over the average cost of the preceding year, which was \$59.09 per ton. Still, American merchants were most fortunate in the time they hit upon for procuring their supplies, as prices advanced very considerably afterwards, owing to circumstances I will point out further on.

The direct shipments of currants to the United States for the past fifteen years have been as follows:

Years.	Quantity.	Duty.
	<i>Tons.</i>	
1865.....	1,411	5 cents per pound.
1866.....	2,637	Do.
1867.....	2,182	Do.
1868.....	2,808	Do.
1869.....	1,143	Do.
1870.....	3,356	2½ cents per pound.
1871.....	5,020	Do.
1872.....	4,458	1 cent per pound.
1873.....	6,280	Do.
1874.....	6,129	Do.
1875.....	8,379	Do.
1876.....	7,804	Do.
1877.....	6,325	Do.
1878.....	9,146	Do.
1879.....	9,112	Do.

From the above figures it will be seen that this trade is rapidly increasing, and that since the reduction of the import duty by the United States in 1872 to 1 cent per pound the quantity has about doubled.

#### SHIPPING.

American vessels never enjoyed much of the carrying trade of this country, still occasionally the flag was to be seen in her ports; but during the past year not an American vessel has either brought or taken cargo. The trade between the two countries has, as hitherto, principally been under the British flag, eleven steamers and one sailing vessel of that nationality having loaded portions or entire cargoes for New York, Boston, and Philadelphia.

The freight by steamers has been from 22*s.* 6*d.* to 30*s.* and 10 per cent. per ton gross weight, and by sailing vessel 20*s.* per ton; the goods imported have chiefly come under the Italian flag.

#### GENERAL TRADE.

The exports from the crop of currants in 1878 reached the unprecedented quantity of 100,004 tons; that of the past season is estimated at 10 per cent. less, or, say, about 90,000 tons, which is still a fair crop. At one time it was feared the falling off would have been considerably greater, a new malady called the anthrænose having appeared in the province of Elis, which caused the young shoots in many vineyards to be affected with a rough excrescence, which was followed by the leaves and fruit withering and dropping off. Luckily the summer heats stopped the ravages of this disease, and in August and September the weather was most favorable for the drying, and the fruit was secured in excellent condition.

The shipments from the past season's crop so far have been as follows:

	<i>Tons.</i>
To United States .....	8,160
To United Kingdom .....	55,748
To Canada .....	277
To north of Europe.....	5,844
To Trieste .....	1,446
To Russia .....	195
To France .....	10,451
To Malta .....	2
To port for orders .....	659
To be shipped, about .....	7,218
Total .....	90,000

The crop of valonia, in Acarnania, in 1879 was good and of fine quality; that of the Morea is short. The quantity produced was, in Acarnania and Etolia, 4,500 tons; Messenia and Achaia, 3,000 tons; total, 7,500 tons, against about 8,000 tons the preceding year. The price for second quality was £11 per ton and £14 for the best on board ship. It is being shipped to England, Triest, and Italy.

The crop of olive oil last year proved a complete failure; but this was to be expected, as the preceding crop was very abundant. As it is very rarely that the trees produce two years in succession, the stock now on hand is barely sufficient for local consumption.

The following were about the prices paid for produce exported:

Tobacco .....	per cwt..	\$14 60
Valonia, fine .....	per ton..	68 00
Valonia, second quality .....	do.....	53 50
Fustic .....	do.....	11 00
Currants, finest .....	per cwt..	6 95
Currants, fine .....	do.....	6 45
Currants, second .....	do.....	5 35
Cotton .....	per pound..	12
Wool .....	do.....	09½
Sultana raisins .....	per cwt..	6 55
Figs .....	do.....	3 65
Olive oil .....	per ton..	1 75 to 1 95

The crop of wheat and Indian corn was very small, especially wheat, which was spoiled by drought, and importations of all kinds of grain had to be made from the Danube and Taganrog.

The average prices of grain were as follows:

Wheat .....	per imperial quintal..	\$17 55
Barley .....	do.....	7 45
Maize .....	do.....	9 30
Oats .....	do.....	5 60

The import trade of Greece for the past year was more active; producers having obtained good prices could afford to lay out more money, and the prospects for the present year are still more advantageous.

Two lines of steamers call here monthly, bringing goods from England; that is, a steamer once a fortnight. Every trip these steamers bring some 200 to 300 tons of goods, composed of Manchester goods, iron, sugar, coffee, rice, dry hides, and various other articles. At least fifteen cargoes of cod-fish, principally Labrador, have been imported during the past year, which have realized from 15 to 18 per cent. per quintal for lost freight and insurance. A small quantity of Norwegian fish has also been received via Italy.

Austrian steamers, carrying mails, goods, and passengers, arrive here from Corfu and Triest and from the Levant every alternate Monday; also, another Austrian boat arrives here every alternate Saturday from Corfu and the coast of Dalmatia, and leaves on the return voyage the following day. An occasional French steamer also calls here on her way to Messina, Naples, and Marseilles. Greek steamers run mails and passengers weekly between the different ports, and a new company is being formed to run Greek steamers from Volo to Brindisi, calling at the intermediate ports.

The course of exchange has, during almost the whole year, ruled against this country, but not to such an extent as for the past previous few years, the government having always managed to keep the rate in check by promises of putting an end to the forced currency, but this



still continues and seems likely to. The following has been about the average rate for three-months' bills on London:

	Drachmas.
January .....	29. 10
February .....	29. 80
March .....	30. 20
April .....	29. 60
May .....	29. 35
June .....	29. 45
July .....	29. 00
August .....	29. 30
September .....	28. 40
October .....	28. 00
November .....	28. 40
December .....	28. 50

The finances of this country are still in a most wretched state. Notwithstanding that fresh taxes are constantly being imposed, there is always a deficiency in the budget.

Owing to the ravages of the phylloxera, combined with the uncongenial weather experienced last autumn throughout France, there was an immense reduction in the produce of wine in that country, estimated at over 30,000,000 hectoliters. As soon as this became known there was an immediate advance in the price of currants, in some instances over 100 per cent., it having been discovered last year in France (where a considerable quantity of currants had been sent for the purpose of making spirits) that very fair wines could be made from them, especially champagne.

It is estimated that France will consume 15,000 tons of the past season's crop of currants in this way, without reckoning what she will receive indirectly from England and other countries. I have been informed that 100 kilograms of currants (220 pounds) will give 3 hectoliters of wine; under ordinary circumstances 100 kilograms of currants would cost about 35 francs, laid down in France, and the equivalent of this price, after deducting expenses, well repays the cultivator; but the price now paying is 65 to 70 francs per 100 kilograms; it will readily be seen what a great boon it is to this country that such a new outlet has been opened for her principal produce, for although it cannot be supposed that the weather in France next autumn will be the same as it was last, still it is known that the decrease caused by the phylloxera is very great, and must be felt for some years, even should a means be found to eradicate it; and it is but natural to suppose that other countries finding France can make good wines from dried currants will also do likewise, so that there is every prospect that the enhanced value of currants will continue, and that the produce, which at one time it was apprehended would almost exceed the demand, will go on increasing, there being plenty of land still available for this purpose.

The following is a list of British vessels, with their crews, that have arrived at this port during the past five years:

Years.	Vessels.	Tonnage.	Crews.
1875 .....	124	101, 157	3, 341
1876 .....	139	122, 442	3, 926
1877 .....	148	130, 123	4, 107
1878 .....	125	114, 930	3, 521
1879 .....	119	97, 339	3, 007

The reason of the falling off in the past year was partly on account of the short crop and probably partly on account of the low rates of freight offering; the average rate of freight by steamer to the United

Kingdom was 25s. and 10 per cent. per ton; to Marseilles, 16s. and 5 per cent., and to north of France by sailing vessels, 25s. and 5 per cent. per ton for fruit in bags.

## PUBLIC WORKS.

A contract has lately been ceded to a French company under the name of P. Magnae to construct a breakwater for this port, for the sum of 4,923,000 francs, to be commenced at once and to be finished in five years. This has yet to be confirmed by the Chambers, but if it is carried out will prove of immense advantage.

A French company is also forming a port at Catacolo, and have already made some progress, but the work cannot be finished for several years hence.

Road-making has made no progress worth mentioning, although a special tax for this purpose was collected. It is said, however, several are about to be commenced in this vicinity.

The Germans still continue excavating at Olympia, and have now opened up a considerable area, but I have not heard of anything particularly interesting having been discovered of late, excepting a foot, bearing a golden sandal, said to complete the statue of Mercury of Praxiteles, which, I understand, is considered the finest work of ancient Greece now existing.

From a census taken during the past year, it appears that Greece, being divided into 13 districts, which are composed of 59 provinces, is inhabited by a population of 1,679,775, including the army (18,521), the navy (2,002), and sailors on foreign voyages (5,180), of which 881,080 are males and 798,695 females, of which 743,494 inhabit the Peloponnesus, 547,384 continental Greece, 132,020 the islands of the Ægean, and 231,174 the Ionian Islands. According to the census taken in 1870, the total population was 1,457,894, so that there has been an increase of 221,861 souls, or 1.69 per cent.

E. HANCOCK.

UNITED STATES CONSULATE,  
*Patras, January 31, 1880.*

## TURKISH EMPIRE.

*Report, by Consul-General Heap, on the trade and commerce of the Turkish Empire for the year ending June 30, 1879.*

## LACK OF STATISTICS.

The difficulty of obtaining reliable statistics of the commerce of this empire has prevented the making of a regular report on the subject. The Turkish authorities are either unable or unwilling to give information, and apathy, indifference, and ignorance about these and kindred subjects prevail in the public offices. The confusion in the financial affairs of the empire may in some measure explain this state of things, and the long arrears of pay due to nearly all the public employes render them quite indifferent to the proper discharge of their duties, as well as to the complaints to which their neglect gives rise.

The want of system in the custom-house, where we have principally to look for statistics, added to the unwillingness of the Turks to impart in-

formation, gives such a fragmentary character to the meager data we may succeed in collecting as to render them of little interest or value. These remarks apply equally to the offices of the provinces.

#### INTERNAL COMMUNICATION.

The means of communication in all the Asiatic provinces are in a most primitive state. It is true that sporadic attempts are made by the more enlightened or enterprising governors to make roads and to improve by other works the means of conveying the produce of the interior from one town to another, as well as to the seaboard, but reforms of this kind are generally viewed with disfavor by the old fanatical Turkish party, who look upon them as a mere yielding to the exigencies of Western civilization, and therefore a weakening of Moslemism, and by the natives generally they are considered, as indeed they frequently are, as pretexts for additional taxation. Works made by forced labor (*corvée*) cause more discontent than satisfaction, and the complaints they occasion when they reach headquarters are used as excuses for the removal of the reforming "Vali" and the appointment of a more favored courtier. The successor naturally avoids as much as possible following in his predecessor's footsteps, and not only discontinues the improvements but neglects to keep in repair those already made. Roads made by forced labor are generally badly constructed, and unless constantly repaired speedily fall to ruin.

#### CONDITION OF ASIA MINOR.

The expense of transportation in Asia Minor of agricultural produce amounts frequently to treble its value; hence the cultivation of extensive tracts of rich lands in the interior is neglected, as the people plant only what is necessary to provide for their immediate wants and to pay their taxes. Except near a seaport, nothing is raised for exportation, and the people have no surplus to pay for imports. Thus a large, populous, and extremely rich country is reduced by ignorance, misgovernment, and maladministration to the extremes of poverty and misery. The wretchedness of the population of Asia Minor, especially in the provinces devastated by the late war, is indescribable.

#### IMPORTS FROM THE UNITED STATES.

*Petroleum*, from its low price and its facility of transportation, finds a ready sale even in the remotest provinces of Asia Minor. It is used by everybody and everywhere; even the sacred lamps over the Prophet's tomb at Mecca are fed with oil from the wells of Pennsylvania.

*Alcohol*.—Petroleum and alcohol are the principal imports from the United States.

*Arms*.—There has been a large importation of arms from the United States by the government, but this, as well as that of other warlike stores, has nearly if not quite come to an end.

*Anthracite coal*, from Pennsylvania, has been sent to Alexandria and Constantinople as an experiment, but unfortunately the quality was found to be inferior even by our own naval officers, and it obtained no sale. Only coal of a fair quality can be sold here, and there must also be a reasonable economy in the price or some advantage in its use to induce the changes in the furnaces of steamers to adapt them to burn anthracite. The coal from the mines of Heraclea, on the Black Sea, although the quality is not of the best, is much used here on account of its low price, especially by the Bosphorus and coasting steamers. There

are coal mines of a better quality near Smyrna, but here, as elsewhere, the government, in its blind ignorance to its best interests, has thrown so many obstacles in the way of those who have offered to work them, that but a comparatively small quantity of coal is extracted from them.

*Cereals.*—The vicinity of the grain-producing provinces of Russia renders the competition of the United States in wheat and flour almost hopeless, and in Indian corn and barley entirely so.

*Labor-saving machinery.*—The excellent and economical labor-saving machinery of the United States finds as yet only a limited sale in this country. The habits of the people, especially in the interior provinces, are so primitive, that even if they could afford to purchase improved agricultural implements few would employ them. They must be educated to their use, but for the present their poverty would in any case preclude their purchasing them.

#### AMERICAN STEAMSHIPS WANTED.

No American merchant vessel has arrived here during the past fiscal year. All imports from the United States have come under foreign flags, on account of the cheaper freights. It is believed, however, that a line of steamers from the United States, prudently and economically managed, would soon find remunerative employment, and in time establish a direct and profitable trade. They might touch at different ports on their way up the Mediterranean and archipelago, such as Tangiers, Gibraltar, Algiers, Tunis, Palermo, Beirut, Smyrna, and Constantinople, and even extend their voyages to Odessa and Trebizond, Batoum or Poti.

The trade between the Black Sea and Persia, which has followed from a remote period the route from Trebizond, is being slowly but surely transferred to Poti, which is already in railroad connection with Tiflis, and will eventually be with Persia. When Persia, inhabited as it is by a more progressive, if not more enlightened, people, is brought into easier communication with the Western World a market will be found there for our produce and manufactures.

#### BRITISH STEAMSHIPS.

It is well to remark that an American line of steamers must be prepared to meet a serious competition on the part of the English, who have already many such lines in operation, and whose ships, of large tonnage and excellently appointed, are very economically managed. Besides transient steamers, there are no less than five companies trading between England and Constantinople and the Black Sea, viz:

The Inman line, with 25 steamers, ranging from 700 to 6,000 tons; the Cunard line, with 20 steamers, of 1,000 to 3,000 tons; the Moss line, with 16 steamers of 1,500 to 4,000 tons; the Pappayanni line, with 8 steamers of 2,800 to 3,000 tons; and the London and Levant line.

All these lines carry through freight for the United States, with transshipment at Liverpool.

*Other foreign steamships.*—In addition to these there are the French, Italian, Austrian, Russian, Turkish, and Egyptian lines of weekly steamers carrying mails and passengers as well as freight.

#### NAVIGATION.

The inclosed tables, numbered 1, 2, and 3, show the arrivals and clearances of sailing vessels and steamers for the year ending June 30, 1879.

It will be noticed that not a vessel bearing the flag of the United States appears on them.

#### OUR CARRYING TRADE IN FOREIGN HANDS.

All imports from the United States direct come principally in Austrian and Italian sailing vessels, or, if indirectly, in British steamers, via Liverpool. Petroleum and alcohol are the principal imports in sailing vessels. On the first of these two articles the sum of \$185,000 has been paid for freight to this port during the twelve months embraced in these returns, the whole of which has gone to foreign vessels. It would thus appear that the commerce of the United States with Turkey pays a tax in freight to foreign shipping which should be an important element for the support of our own.

On the other hand, all exports hence to the United States are sent via England in British steamers.

#### STEAM VS. SAILING VESSELS.

There is a drawback on the commerce in sailing vessels on account of the delay in coming up the Dardanelles when contrary winds prevail, or the expense of tonnage. Vessels are frequently delayed there several weeks by northerly winds, unless they resign themselves to the cost of a towboat; and the same delay or expense occurs here if they are bound to the Black Sea. For this cause the commerce by steam is gradually superseding that by sailing vessels.

#### PROJECTED HARBOR IMPROVEMENT IN CONSTANTINOPLE.

An important improvement has been projected here in the construction of quays and wharves on both sides of the Golden Horn, a concession for this great work having been granted to Michel Pacha, who has had charge of the light-house department for the last twenty years. This will be a great undertaking, if it is ever carried out, the expenditure being estimated at upwards of \$40,000,000. The money will be furnished by European capitalists, for it is unnecessary to state that this government is quite unable to contribute the slightest pecuniary assistance. This harbor, which by nature is one of the most secure, capacious, and beautiful in the world, has become by neglect and ignorance very inconvenient. There are no landing docks or stages, and all steamers are compelled to discharge in lighters, at great delay, trouble, and expense. Although there is deep water close inshore, there are few places where it is convenient or perfectly secure to land even from a boat, buildings being crowded to the water's edge, and, indeed, over the water, on piles.

#### ROUMANIA AND BULGARIA.

When Roumania, Bulgaria, Eastern Roumelia, and the provinces still remaining to Turkey in Europe have recovered from the effects of the late devastating war, and tranquillity is restored where agitation and disquiet are still kept up, we may expect an active revival of commerce in those regions. The people are intelligent and progressive; those of the autonomous provinces are ambitious to stand in line with their more advanced neighbors. The means of education and the study of the useful and liberal as well as of the ornamental arts are eagerly sought

for by their youth. After many generations of darkness the light of liberty has at last dawned on them, and it is easy to see by the ardor with which the means of education are availed of, and the zeal with which the study of liberal institutions is pursued by the youth of Bulgaria, how severe the repression must have been. When commercial relations have been established between the United States and these provinces we may expect a large demand for our manufactures.

#### TRADE BETWEEN THE UNITED STATES AND CONSTANTINOPLE.

I inclose a brief statement of the imports and exports between the United States and Constantinople for the year ended 30th June last. The table of imports, for reasons already stated, does not include all the goods received from the United States.

G. H. HEAP.

UNITED STATES CONSULATE-GENERAL,  
*Constantinople, December 20, 1879.*

#### COMMERCE OF CONSTANTINOPLE.

##### No. 1.—*Sailing vessels arrived and cleared dured the year ended June 30, 1879.*

Flag.	Number.	Tons.
Ottoman .....	3, 705	330, 599
Samian .....	107	8, 539
German .....	36	13, 366
British .....	161	45, 027
Austro-Hungarian .....	516	194, 155
Danish .....	4	588
Spanish .....	2	498
French .....	10	467
Greek .....	3, 344	645, 908
Dutch .....	2	368
Italian .....	1, 158	438, 954
Swedish and Norwegian .....	44	13, 962
Roumanian .....	13	2, 318
Russian .....	104	8, 352
Uruguayan .....	8	726
Coasting .....	5, 790	88, 653
Total .....	14, 999	1, 792, 460

##### No. 2.—*Steamers arrived and cleared during the year ended June 30, 1879.*

Flag.	Number.	Tons.
Ottoman .....	9	1, 557
Samian .....	10	891
German .....	47	39, 998
British .....	3, 390	2, 641, 313
Belgian .....	72	58, 371
Danish .....	18	16, 332
French .....	142	101, 235
Greek .....	188	56, 504
Dutch .....	29	27, 843
Italian .....	107	20, 400
Swedish and Norwegian .....	57	34, 058
Russian .....	4	1, 921
Servian .....	1	644
Coasting .....	411	78, 876
Total .....	4, 485	3, 079, 943

No. 3.—*Mail steamers arrived and cleared during the year ended June 30, 1879.*

Name of company and flag.	Number.	Tons.
Lloyd's, Austrian .....	397	424, 462
Messageries, French .....	209	248, 021
Russian Company .....	223	144, 711
Mahsoudé, Ottoman .....	117	69, 735
Khédivié, Egyptian .....	45	41, 480
Florio, Italian .....	142	143, 034
• Total .....	1, 133	1, 071, 443

*Statement showing the imports and exports between Constantinople, Turkey, and the United States for the year ended June 30, 1879.*

## IMPORTS.

Articles.	Amount.	Value.
Martini-Henry rifles .....	number.. 68, 000	\$392, 776 00
Petroleum .....	cases.. 420, 680	700, 551 12
Gunpowder .....	pounds.. 240, 000	
Lead .....	do.. 674, 000	635, 037 36
Antimony .....	do.. 20, 458	
Zinc .....	do.. 8, 840	
Alcohol .....	packages.. 6, 896	120, 229 37
Rum .....	barrels.. 200	
Turpentine .....	do.. 400	
Patent medicines .....	packages.. 929	15, 894 69
Hardware, machinery, &c .....	do.. 792	6, 870 50
Sundries .....	do.. 45	2, 132 00
		403 32
		2, 472, 884 36

## EXPORTS.

Gum tragacanth .....	cwt.. 428	\$24, 231 68
Ottar of roses .....	ounces.. 4, 020	26, 146 78
Opium .....	pounds.. 7, 439	25, 339 00
Canary seed .....	bags.. 3, 020	16, 943 10
Turkish bazaar goods .....	cases.. 76	15, 618 92
Rugs .....	bales.. 33	7, 083 28
Carpets .....	do.. 26	6, 581 80
Tobacco .....	pounds.. 15, 565	3, 309 88
Wool .....	bales.. 80	2, 813 87
Oil of geranium .....	pounds.. 822	1, 419 69
Oil of sandalwood .....	do.. 135	855 28
Scamony .....	do.. 121	734 39
Gum mastic .....	do.. 25	29 80
Sundries .....	boxes.. 2	650 00
		133, 690 81

## ROUMANIA.

*Report, by Consular Agent Stern, of Bucharest, on Roumania, its independence, condition, products, and foreign commerce.*

## INDEPENDENCE OF ROUMANIA.

In consequence of the recent Turco-Russian war, and the provisions of the Treaty of Berlin, the political as well as territorial condition of Roumania has undergone important changes, which are calculated to modify both her international rôle and her economical development.

According to the Convention of Paris of 1858, the two principalities of Moldavia and Wallachia, increased by a portion of Bessarabia, were placed under the collective guarantee of the seven great powers and the

sovereignty of the Sublime Porte. They were to have an autonomous administration and to be governed by a separate hospodar. The election in 1859 of Prince Alexander Konza by the assemblies of both countries realized a personal union which was acknowledged by the powers for the lifetime of Prince Konza. In 1861 another firman of the Porte approved the administrative and legislative union. When, in 1866, Prince Konza was compelled to abdicate, and Prince Charles, of Hohenzollern, elected, the complete union was, after protracted negotiations, recognized by the powers and the Porte, who granted a firman of investiture (October 23, 1866). Owing to the ill-defined status of the sovereignty of Roumania, she disclaimed all connection of vassalage with the Porte beyond the payment of the tribute, while the latter continued to consider her as a privileged province of the Ottoman Empire, and protested against her accrediting diplomatical agents at the foreign courts and concluding direct treaties with them.

Before the Russian troops crossed the Pruth, in April, 1877, a convention was concluded (a copy of which I had the honor to transmit to you), wherein the conditions of the passage through and the sojourn in Roumania of the Russian army was regulated and the integrity of the present territory of Roumania guaranteed by Russia. Until the latter part of the siege of Plevna, Roumania observed a neutral attitude, but when the Porte insisted to occupy Roumania, and the powers declined to defend either her neutrality or that of the Danube, it became evident that her line of defense was no more this river, but Plevna, and that in case of a Russian defeat Roumania was likely to become the battle-field. Thus it was that on the pressing invitation of the Grand Duke Nicholas the Roumanian troops crossed the Danube and joined the Russian army.

The declaration of independence (May, 1877) and the rupture of the ancient ties with Turkey was a natural result of the declaration of war.

In spite of the gallant conduct and the valuable services of her troops, Roumania was not admitted to participate in the Treaty of St. Stefano, which contained clauses affecting her closely. The Treaty of Berlin stipulated the retrocession of Bessarabia to Russia in exchange for the Dobrobrdsha, and acknowledged her independence, subject, however, to the condition (article 44) of granting civil and political equality and liberty of trade to all, without destruction of religious creed.

Accepting her new position, Roumania has occupied the Dobrobrdsha, a country which, besides being larger and having a more numerous population than Bessarabia, offers the advantage of several good ports on the Black Sea, such as Kustendje and Sulina, which, if properly improved, will become excellent means of commercial prosperity. A constitutional convention will soon be convoked in order to extend that civil equality and religious freedom which the powers have stipulated as a *conditio sine qua non* of her independence. Roumania cannot, indeed, desire to start on her new career with a practical denial of these principles, which are generally acknowledged by civilized nations.

#### TERRITORY AND POPULATION.

The present territory of Roumania may be estimated at 125,504 kilometers, comprising the probable area of the Dobrobrdsha, viz, 11,451 kilometers. The last returns show a total population of 5,300,000, 30 to 40 inhabitants per square kilometer, the smallest density in European states. Of these more than five-eighths are peasants engaged in agriculture. The towns contain 1,000,000 inhabitants, of whom 65,000 are tradesmen, 33,000 merchants, 25,000 artisans, 23,000 public officers,



9,800 priests, 3,970 monks and nuns. The mortality is considerable, owing to the insufficiency of sanitary and hygienic measures. In 1874 there was an excedent of 2,805 deaths. If the population has increased since 1860, with 13,000, this is attributable to the immigration, which ought to be favored by all possible means, instead of being checked, as it were, by restrictions and defense of colonization.

#### PRODUCTION.

In the almost complete absence of industry the main production is that of the soil, of which about two-thirds, about 7,823,439 hectares, are cultivated, while nearly 2,500,000 are totally uncultivated. In 1875 there were sown one and one-third million hectares with wheat, yielding 11,500,000 hectoliters; one and one-third million hectares with Indian corn, yielding 22,000,000 hectoliters; 462,000 hectares with oats, yielding 3,250,000 hectoliters; 335,000 hectares with rye and barley, yielding 2,500,000 hectoliters; 48,000 hectares with rape-seed, yielding 250,000 hectoliters; 46,000 hectares with potatoes, yielding 23,500,000 kilograms; 33,000 hectares with tobacco, yielding 1,750,000 kilograms; 33,000 hectares with vegetables, yielding 14,500,000 kilograms.

The wine crop was in 1874 1,250,000 hectoliters; in 1875 1,500,000, little less than 12 hectoliters per hectare.

The total production of the country does not exceed 400,000,000 francs. The crops have been but average ever since 1866, on account of unfavorable climatical circumstances, frequent and excessive droughts, want of proper irrigation, and especially of old routine of agriculture. There is, however, an increasing use of agricultural machines imported from England, France, Belgium, Austria, and the United States. The total amount of machines employed in 1875 was only 2,937. Unfortunately the number of cattle is on the decrease since 1870, and on many sides the desire has been expressed to import a good race of horses, and especially oxen; the latter from America. The government is disposed to offer special advantages and facilities to such import, and I would call the special attention of American growers and exporters to this point. Applications to this office will be readily answered and all information given.

Other branches of industry are little cultivated. The soil contains rich sediments of silver, copper, iron, and other metals; likewise coal and other minerals. Capital and labor will find here a profitable investment in the future. Salt and petroleum are much explored, and the former largely exported; the latter, however, is largely imported from the United States.

#### TRADE AND COMMERCE.

Owing to the blockade of the Danube during the late war the trade has suffered severely by the reduction of the exports, little compensated by the supplies to the Russian army. Since a number of years the exports of cereals have diminished. This is ascribed first to the increased export to Europe of Russian and American cereals, and secondly to the inferior quality and higher cost of Roumanian cereals. It is evident that America will in a few years make dangerous competition to the wheat, as well as Indian corn and oats, from the Danube. Efforts ought, therefore, to be made to improve the means of communication, profiting of the seaports of the Dobrudsha, and to ameliorate the system of agriculture, increasing the use of agricultural machines. The commissioner of Roumania, in his official report on the Paris Exhibition,

calls special attention to the American machines, which will find an important market in this country.

The stagnation of the export trade has naturally been followed by a corresponding stagnation of the imports and of the trade in general.

The following tables show the imports and exports for the year 1875, according to the last official returns.

Table A shows the totals of the principal articles exported, their quantity, value, and destination. By far the most important articles exported are the cereals, for which the markets are: Turkey, with 27,000,000 francs; France, 21,000,000; England, nearly 18,000,000; Austria, nearly 16,000,000. These countries receive nothing except rough materials from Roumania, which they send back manufactured.

Table B specifies the principal cereals exported.

The animals exported are principally asses and mules, buffaloes, oxen and calves, horses, sheep, swine (of which 4,809,548 go to Hungary), small quantities of fish, and poultry.

Among the animal products may be mentioned white and dyed wool (5,750,000 francs), skins, meal, honey, bones, hair of horses, swine and oxen, butter, eggs, &c.

The manufactures of animal products comprise milk and cheese, wax, candles, caviare, and grease.

Of minerals should be mentioned, tar (725,119 francs), salt (970,294 exported to Austria, Turkey, and Russia), gas, petroleum (1,700,475 to Austria, and Turkey).

#### IMPORTS.

The imports for the same year, 1875, amounted to 100,834,169 francs, divided as follows:

	Francs.
From England.....	25, 158, 227
From Austria-Hungary.....	40, 206, 069
From Belgium.....	177, 454
From France.....	15, 560, 859
From Germany.....	4, 969, 413
From Italy.....	374, 250
From Russia.....	2, 395, 906
From Servia.....	153, 877
From Turkey.....	7, 354, 262
From other countries.....	4, 483, 822

Table C specifies the principal articles imported, their origin, and value in francs.

#### COMMUNICATION.

The principal means of communication has hitherto been the Danube, for the carrying trade as well as the service between the 12 small Roumanian ports. The navigation is carried on especially by the Austro-Hungarian Danube Navigation Company. Recently the increased system of railways has greatly promoted the facilities for communication; their utility is, however, diminished by the lack of sufficient branch roads. Roumania at present, 1,233 kilometers of railway. The principal line (953 kilometers) runs through the whole country from Itzkan (Austrian frontier) to Verciorova near Oreova (Hungarian frontier), where it is connected with the Oreova-Temesvar line, while the branch line, Iassy-Unghen's (on the Pruth), connects it with the Russian railway, and the line Bucharest-Giurgewo carries it to the Danube. It connects, therefore, the country with Bukowina, Jalicia, Russia, the Banat, Bessarabia, and Odessa. When the projected bridge over the Danube shall be constructed, this route will become the shortest connection between the

Occident and the East. The lines, with the exception of the small line, Bucharest-Giurgewo, have been constructed and are run by private companies with government guarantee. The cost of construction is 270,000 francs per kilometer, the state guaranteeing a revenue of  $7\frac{1}{2}$  per cent. viz, a total annuity of 22,500,000 of francs, of which the traffic receipts cover scarcely one-seventh.

Bucharest, the capital, can now be reached direct from Vienna in thirty-six hours. The city has much improved in the last five years. In addition to being better paved, and lighted with gas, tramways now extend in all directions. The population is estimated at 225,000 souls.

#### FINANCES.

Considering the exceptional position which she has held, and largely imposed upon herself, by reason of her exclusive laws, the financial condition of Roumania has continued to improve. I await the official returns in order to transmit a complete report of the financial condition of the country at the close of the fiscal year 1878. In 1877 the public debt amounted to 468,677,730 francs, with an annuity of 40,500,000 francs. The income was estimated at 81,000,000 francs, the expenses at 87,500,000 francs, showing a deficit of 6,500,000 francs. According to reliable sources, the floating debt in 1878 will be not less than 117,000,000 francs, equal to an annuity of 55,700,000 francs, or three-fourths of the total revenue. Adding to this the minimum of the annual expenses of 42,000,000 francs, we obtain 98,000,000 francs, against a regular revenue of 80,000,000 francs, viz, a yearly deficit of 18,000,000 francs. Efforts are made to remedy this by sales of state property (which is estimated at 300,000,000 francs), reduction of expenses (especially for army purposes), and increase of customs duties, &c.

#### EDUCATION.

Very considerable strides have been made in recent years to improve education, and if the projected plan should be carried out, important advances may be attained within a few years. Instruction is gratuitous and compulsory since 1864. The number of schools in the rural districts is 2,182, with 56,700 pupils; in the towns, 232, with 26,500 pupils, besides 224 private schools. Bucharest and Jassy have each a university.

#### LAWS AND JUSTICE.

Since 1860 Roumania has a complete codification of civil and criminal law, modeled after the French codes. Procedure is public and oral. The judicial system comprises justices of peace, tribunals of first instance (at the residence of each district), four courts of appeal, and one court of cassation.

#### CONCLUSION.

From the foregoing exhibits and remarks you will observe that important changes have and are taking place in the political and economical condition of the country. The admission of the state into the great family of nations, and its direct and constant communication with the life, enterprise, and industry of the west of Europe, are rapidly working revolutions which are destined to accomplish important results. For centuries the rich granary of the contending forces of Russia and Turkey, Roumania at length independent, and extending equal rights

to all her subjects, in the accomplishment of which latter beneficent act the Government of the United States must ever bear a prominent historical recognition, cannot fail, under the new impetus given to her productions and the development of her resources, to attain in the east a portion similar to that of Belgium in the west of Europe.

ADOLPH STERN.

UNITED STATES CONSULAR AGENCY,  
*Bucharest.*

38 C R—VOL II

## IMPORTS INTO ROUMANIA.

Whence imported.

Articles.	England.	Austria-Hungary.	Belgium.	France.	Germany.	Italy.	Russia.	Serbia.	Turkey.	Other countries.	Total.
	£st.	£st.	£st.	£st.	£st.	£st.	£st.	£st.	£st.	£st.	£st.
Animals.....	1,568,697	27,244	.....	15,171	15,728	5,056	164,536	.....	101,954	62,473	1,802,293
Fruits.....	31,211	198,197	.....	710,797	67,990	80,026	34,730	.....	885,757	4,374,126	5,004,604
Spices.....	2,000	105,133	.....	58,350	4,440	3,755	6,563	.....	62,960	50,838	206,604
Tobacco.....	218,482	2,044,364	200	58,142	93	.....	36,747	.....	1,181,197	1,428	2,312,101
Beverages.....	294,321	1,194,256	1,820	730,397	87,869	9,088	.....	614	60,631	66,064	1,312,650
Sugar.....	31,962	1,343,303	.....	2,527,685	2,394	1,068	.....	.....	37,429	23,511	2,229,765
Leather.....	74,134	419,234	672	659,214	110,314	.....	13,328	146	24,840	18,822	2,403,717
Dyes.....	220,277	113,186	.....	70,283	11,816	2,566	7,825	.....	12,004	7,106	628,700
Minerals.....	3,205	107,646	3,280	149,714	59,384	28,277	4,348	2,563	64,640	16,808	660,487
Toilet articles.....	1,052,553	654,508	.....	249,458	63,636	38,313	2,450	.....	8,070	1,322	1,948,081
Metals.....	4,754,817	439,430	.....	189,484	17,872	.....	7,123	.....	13,313	13,313	5,217,004
Cotton threads.....	7,662,053	2,964,461	4,079	914,086	56,475	804	62,027	.....	145,148	20,700	13,131,416
Cotton and thread ware.....	2,328,083	4,518,265	670	1,664,947	1,228,809	34,049	13,290	.....	53,608	173,477	9,810,707
Woolen ware.....	25,502	131,112	923	509,086	192,761	3,680	3,369	.....	45,341	25,723	857,402
Silks.....	161,266	4,182,561	32	940,488	130,163	6,753	.....	.....	3,161	2,008	4,490,423
Clothing.....	6,344	1,572,184	1,544	325,143	74,823	1,100	2,133	76	2,136	3,290	1,687,633
Paper.....	48,030	1,504,949	.....	260,488	40,310	100	255	36	1,837	1,088	878,613
Furniture.....	1,863	875,663	.....	23,310	2,462	.....	73,830	120	3,465	1,000	963,842
Carriage.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Musical, optical, and chirographical instruments.....	14,907	145,531	300	53,573	76,864	103	.....	.....	403	874	292,623
Precious metals and their fabrics.....	2,474	105,439	.....	55,752	62,265	.....	1,901	.....	403	1,200	223,274
Glass, porcelain.....	187,634	968,859	98,643	291,700	118,793	8,382	4,572	.....	8,801	10,063	1,602,488
Weapons.....	39,108	79,875	11,898	143,123	118,793	1,130	.....	.....	1,289	2,087	290,351
Agricultural machines.....	2,107,814	816,581	36	20,088	9,469	.....	.....	120	1,289	58	2,935,360
Agricultural and other implements.....	1,821,031	2,869,344	6,121	766,252	397,352	2,120	90,164	174	128,346	31,162	6,131,470

## EXPORTS FROM ROUMANIA.

Articles.	Destination.										
	England.	Austria-Hungary.	Belgium.	France.	Germany.	Italy.	Russia.	Serbia.	Turkey.	Other countries.	Total.
Animal matters:											
Animals	<i>Lei.</i> 427	<i>Lei.</i> 11,825,729	<i>Lei.</i>	<i>Lei.</i> 9,709	<i>Lei.</i>	<i>Lei.</i>	<i>Lei.</i> 671,752	<i>Lei.</i> 101,971	<i>Lei.</i> 1,115,460	<i>Lei.</i> 6,050	<i>Lei.</i> 13,731,069
Animal products	278,226	7,596,930		516,378	57,102		83,819	10,859	728,041	173,580	9,904,863
Fabrics of animal products	1,209	258,303		36			14,804	3,516	1,900,830	8,743	1,887,522
Total	279,853	19,682,962		526,114	57,102		1,230,465	116,346	3,442,331	188,301	25,523,474
Vegetable matters:											
Cereals	17,993,127	15,950,049	486,468	21,209,743	42,925	1,764,977	315,611	9,155	27,736,093	19,704,568	105,212,696
Seeds	313,902	1,016,048		2,290,645	50,362		57,944	289	1,728,627	1,292,374	6,707,891
Fabrics of seeds	3,660	20,084				9,663	8,120	2,152	1,019,258	24,517	1,087,784
Vegetables		22,435				1,774	36,280	120	70,199	23	130,831
Fruits	3,320	124,003					24,968		37,124	80	189,495
Fabrics of fruits		163,804		208	90		1,214		66,848		232,054
Timber		108,757		360			91,375		1,515,423	125	1,716,040
Manufactures of timber		23,574					12,928		53,302	510	90,374
Total	18,314,309	17,428,754	486,468	23,509,956	102,037	1,776,414	548,440	11,716	32,226,924	21,022,187	115,427,205
Mineral matters:											
Minerals		471,348					281,653	214,000	741,601	10,000	1,688,602
Manufactures of minerals		944,423					55,837	1,010	772,720	560	1,774,550
Total		1,415,771					317,490	215,010	1,514,321	10,560	3,473,152
Total general	19,594,162	38,527,487	486,468	24,036,070	159,139	1,776,414	2,096,395	343,072	37,183,576	21,221,048	144,423,831

## CEREALS EXPORTED FROM ROUMANIA.

## Destination.

Articles.	Destination.										Total.
	England.	Austria-Hungary.	Belgium.	France.	Germany.	Italy.	Russia.	Servia.	Turkey.	Other countries.	
Wheat	<i>Lci.</i> 5,569,358	<i>Lci.</i> 11,663,196	<i>Lci.</i> 108,047	<i>Lci.</i> 19,807,423	<i>Lci.</i> 42,925	<i>Lci.</i> 1,462,531	<i>Lci.</i> 64,810	<i>Lci.</i> 5,185	<i>Lci.</i> 11,639,388	<i>Lci.</i> 17,719,004	<i>Lci.</i> 68,111,847
Rye	474,047	328,634	27,990	138,078		5,228	8,383		1,057,266	409,248	2,448,884
Buckwheat									538		538
Barley	1,202,820	878,336	134,460	325,246		72,648	93,329	720	5,673,948	574,023	9,015,530
Oats	114,570	118,190		319,824			6,810		88,782	44,310	689,486
Rice		5,283		54,270			7,905		103,305	60,240	240,013
Indian corn	10,519,592	2,873,579	215,971	560,697		224,570	127,404	8,250	9,140,918	808,431	24,474,412
Millet	52,740	33,595		4,205			6,960		31,608	19,090	148,198
Rapeseed	313,902	852,641		2,185,767	59,062		16,425		578,853	1,277,898	5,284,348
Other cereals		22,226							330	61,212	83,768
Total	18,307,029	16,802,690	486,468	23,395,510	101,987	1,764,977	332,036	9,155	28,314,936	20,362,256	110,497,044

**RUSSIA.**

*Report, by Consul-General Edwards, of St. Petersburg, on the imports and exports of Russia, for the years 1877 and 1878, and a schedule of duties on imports into Russia under existing statutes.*

I have the honor to transmit herewith for your information a comparative statement of the imports and exports of Russia during the years 1877 and 1878, also a schedule of duties on importations into Russia under existing statutes.

**DISTURBED CONDITION OF THE COUNTRY.**

The ukase by which all custom dues are payable in gold has been in operation two years and four months, and, coupled with the high rate of exchange which has prevailed during the greater portion of that period, has had the effect to almost preclude the possibility of introducing into this market goods and wares upon which a high tariff is imposed.

The real cause of the high rate of exchange and consequent depreciation in the value of the paper currency, which is the only current money in use in business and commercial transactions in Russia, lies, it is held in well-informed circles, not so much in the existence of a want of confidence in the recuperative energies of the country, as in an apprehension that the government officials may in their zealous endeavors to surmount the internal difficulties and disorders bring about, by the execution of severe measures, complications into which it is impossible to foresee who might keep out of them or who might be drawn in. Consequent confusion and uneasiness prevail throughout social, financial, and commercial circles.

It is not to be disguised that Russia is in a most inflammable state, and it seems impossible for the *gendarmierie* to discover even the printing presses of the secret societies, and they are certainly unable to obtain any data relative to the connections or dimensions of the organizations. The government cannot be brought face to face with them, and it is generally believed that severity will not repress them, but may be productive of injurious results.

It would seem that no doubt can be entertained of the existence among the higher classes, and especially among that element who were opposed to the emancipation of the serfs, of a certain amount of inert sympathy with the views of the socialists. There is also a wide-spread belief that effective redress for the abuse of administrative authority on the part of those to whom it is intrusted and the internal disorders lies in placing the administration to a certain extent under public check.

**THE PLAGUE IN SOUTHERN RUSSIA.**

The loss to Russian commerce by the appearance of the plague in Southern Russia cannot be estimated with any degree of certainty, because this loss was not confined to the neighborhood infected by the epidemic, but extended to and cast a gloom over the entire country, and seriously disturbed the restoration of the credit of the country.

The news of the disappearance of the plague caused business to revive, the rate of exchange fell, and at the opening of the spring trade all indications pointed to a decided improvement in the business and commercial affairs of the country.



## SECRET SOCIETIES AS THEY AFFECT COMMERCE.

The sudden and unexpected activity of the secret organizations, resulting in an attempt on the life of the Emperor, has given a sudden check to those prospects. Exchange on London, ninety days' sight, is again quoted at 22½d. to 23d. per ruble, and I am firmly convinced that so long as the credit of the country is exposed to the uncertain and fanciful projects of these societies commercial confidence will not increase and the rate of exchange will remain unsettled. In this connection it is proper for me to state that the internal business affairs of the country are in the most satisfactory condition; the industries producing goods and wares for home consumption were never more active or prosperous.

## AGRICULTURAL TOOLS AND MACHINERY.

By reference to the inclosed schedule of duties, it will be observed that agricultural machinery is free from duty, and a liberal tariff is imposed on all kinds of tools and implements, as well as other kinds of machinery and cutlery.

The sales of those articles in this market of English and German manufacture have more than doubled during the past two years, notwithstanding the high rate of exchange. The increasing demand for factory and mill machinery and implements is the direct result of the ukase in question, which has given an enormous stimulus to home industries.

The increasing demand for agricultural machinery and implements is due to the progress made by our own country in the production and exportation of grain.

## AMERICAN VS. RUSSIAN AGRICULTURAL PRODUCTIONS.

The interesting and mysterious question with these people is to know the extreme limit of the price where the American farmer can dispose of his grain without actual loss.

I am trustworthily informed that a government commission will soon leave Odessa for the United States, in order to solve this and other important questions relative to our system of agriculture and manner of handling grain at the shipping ports.

There is much fear that the effect of the new tariff of Germany, which fixes a duty of 6½ cents per bushel on wheat, oats, and husked fruit, and 3¼ cents per bushel on rye, barley, Indian corn, and buckwheat, may be to cause another perceptible depreciation of the prices of those cereals in this market.

This feeling will be better understood when it is known that Germany has heretofore been a large consumer of Russian cereals, and large quantities reached the markets of Western Europe through German territory.

The Russian farmers have, by reason of the cost of production, transportation, handling, and the strong competition, reached that point where it is no longer profitable to cultivate grain.

The question of economic transportation is as far removed from their reach and control as that of competition; it may therefore be fairly assumed that more active steps must be taken by them looking to the introduction of machinery and other means of the reduction of the cost of production and handling the cereals.

The United States is recognized as the leading agricultural country

of the world, and no country is more forcibly impressed with that information than Russia. It is also agreed that much of that success is due to the systematic use of improved machinery manufactured in the United States; it is not therefore unreasonable to assume that our machinery, if properly represented by energetic and skillful agents in an agricultural country with a climate and soil not unlike our own, would meet with a greater demand and sale than the machinery manufactured by non-agricultural countries merely for sale.

#### HOW TO INTRODUCE AMERICAN AGRICULTURAL MACHINERY.

There is one thing, however, our exporters must understand. It is useless to send circulars and catalogues to this country, and quite impossible to establish a firm and healthy trade by consigning agricultural machinery and implements to houses in cities of Russia far distant from the agricultural regions.

Reliable and trustworthy agents, skilled in the use of the machinery, and possessing a knowledge of the German language, should be sent to establish proper agencies in the small cities of the interior, and within the agricultural regions, which lie between Odessa and Moscow.

These agencies should be placed in charge of mechanics experienced in the repair of machinery and furnished with a complete assortment of implements, &c.

The most serious obstacles to the introduction of heavy agricultural machinery, such as mowers, reapers, &c., at the present time, is the want of shops where they can be repaired.

All such obstacles can be overcome, and very readily, too, if our own manufacturers will only take the trouble to send an experienced agent to investigate the field.

Without some knowledge of the actual wants and business principles of these Eastern people our merchants can make but little progress in this country.

W. H. EDWARDS.

UNITED STATES CONSULATE-GENERAL,  
*St. Petersburg, April 30, 1879.*

*Statement showing the quantities of the principal commodities imported into and exported from Russia during the years 1877 and 1878.*

#### IMPORTS.

Articles.	Quantities.	
	1877.	1878.
Sugar .....	pounds.. 54, 216	24, 120
Tea .....	do. 13, 452, 596	26, 724, 024
Coffee .....	do. 10, 333, 368	16, 098, 732
Oil .....	gallons.. 6, 177, 456	9, 565, 716
Wine .....	do. 4, 558, 880	10, 696, 896
Salt .....	pounds.. 222, 521, 600	369, 870, 732
Herrings .....	do. 88, 617, 204	155, 856, 096
Other fish .....	do. 25, 146, 576	23, 467, 392
Tobacco .....	do. 3, 006, 864	3, 121, 344
Raw cotton .....	do. 132, 464, 016	227, 884, 680
Spun cotton .....	do. 5, 680, 908	18, 127, 116
Indigo .....	do. 1, 387, 792	1, 697, 832
Illuminating oils .....	gallons.. 13, 250, 800	14, 323, 816
Iron:		
In pigs .....	pounds.. 116, 253, 684	230, 959, 692
In bars and scraps .....	do. 113, 687, 984	190, 083, 791
Boiler-plate, and sheet .....	do. 49, 293, 144	68, 646, 276
In rails .....	do. 37, 017, 124	10, 967, 112

*Statement showing the quantities of the principal commodities imported, &c.—Continued*

## IMPORTS—Continued.

Articles.	Quantities.	
	1877.	1878.
Rails, in Bessemer steel.....	pounds 375, 195, 996	331, 622, 172
Lead.....	do 38, 284, 220	43, 570, 944
Coal.....	tons 1, 452, 338	1, 785, 843
Soda.....	pounds 32, 644, 908	57, 553, 344
Locomotives and machinery.....	do 69, 411, 996	113, 523, 600
Wool:		
Raw, undyed.....	do 4, 970, 088	12, 898, 764
Not worsted, dyed.....	do 1, 911, 744	3, 716, 928
Woolen and hair yarn.....	do 5, 508, 000	13, 548, 484
Silk.....	do 3, 268, 292	983, 052
Cotton wool, and silk tissues.....	do 3, 905, 856	6, 853, 392
Flax tissues.....	value \$458, 356	\$966, 223

## EXPORTS.

Breadstuffs:			
Wheat.....	bushels 51, 596, 632	103, 141, 844	
Rye.....	do 59, 580, 040	60, 065, 730	
Barley.....	do 12, 732, 431	27, 338, 310	
Indian corn.....	do 3, 295, 332	5, 981, 238	
Pease.....	do 1, 888, 444	1, 331, 166	
Oats.....	do 45, 418, 753	45, 778, 236	
Flour.....	do 8, 947, 004	2, 400, 276	
Other farinaceous food.....	do 4, 453, 985	4, 453, 998	
Total.....	182, 912, 621	250, 490, 828	
Linseed and hempseed.....	pounds 65, 587, 021	101, 480, 904	
Other oil-seed.....	do 9, 642, 535	32, 848, 704	
Oil-cake.....	do 51, 271, 602	53, 672, 076	
Butter.....	do 7, 724, 930	6, 265, 332	
Spirits.....	do 63, 539, 718	42, 299, 604	
Tobacco.....	do 3, 578, 894	8, 942, 940	
Sugar, brown.....	do 126, 135, 385	8, 778, 240	
Sugar, refined.....	do 10, 748, 486	2, 238, 012	
Horned cattle.....	number 47, 295	75, 783	
Sheep.....	do 1, 003, 857	1, 243, 994	
Horses.....	do 370	15, 648	
Tallow.....	pounds 40, 064, 791	22, 294, 872	
Flax.....	do 404, 690, 993	350, 615, 304	
Flax, tow of.....	do 58, 467, 632	41, 663, 268	
Hemp.....	do 122, 445, 785	109, 232, 640	
Hemp, tow of.....	do 3, 762, 270	1, 820, 412	
Linen thread.....	do 1, 720, 562	426, 168	
Hemp thread.....	do 9, 977, 571	11, 442, 780	
Hides and skins:			
Undressed.....	do 8, 871, 575	5, 665, 032	
Dressed and muscovy.....	do 1, 070, 790	1, 294, 808	
Bones.....	do 27, 037, 420	10, 374, 948	
Wool.....	do 52, 429, 366	41, 676, 012	
Bristles.....	do 5, 048, 080	5, 078, 772	
Potash.....	do 5, 827, 262	2, 919, 384	
Iron.....	do 2, 522, 704	5, 323, 140	
Rags.....	do 27, 014, 027	19, 787, 404	
Cordage, twine, &c.....	do 8, 827, 894	8, 212, 100	
Bagging of coarse linen.....	yards 6, 214, 209	2, 918, 984	
Wood.....	value \$23, 265, 824	\$14, 320, 824	
Furs.....	pounds 1, 897, 813	1, 332, 576	

## SCHEDULE OF DUTIES ON IMPORTATIONS INTO RUSSIA UNDER EXISTING STATUTES.

[The duty is payable in gold, and when not otherwise expressly stated is on 1 pood or 36 pounds.]

## I.—PROVISIONS.

1. Grain:		
Grain of all kinds.....		free
Flour, malt and groats.....		\$0 29
Potato meal and starch.....		44
Rice.....		40
Vermicelli, macaroni, sago, and arrowroot.....		80
Dregs, dry or pressed.....		60

## DUTIES ON IMPORTS—Continued.

Salt .....	\$0 30
Salt, port of Archangel .....	17
2. Vegetables and fruits:	
Vegetables fresh or dry, (not pressed or preserved), and chicory .....	free
Fresh fruits and berries and prepared vegetables .....	\$4 00
Fruits and berries preserved in sugar, brandy, or molasses .....	2 40
Oranges, lemons, and pineapples .....	20
Fresh grapes .....	1 04
Capers and olives .....	80
Nuts .....	40
Almonds .....	1 13
Dried fruits and berries .....	80
3. Various alimentary products and spices:	
Not specially named .....	free
Smoked meat, corn-beef, and sausages .....	\$0 52
Cheese .....	3 20
Butter .....	32
Honey and molasses .....	52
Sirup, except honey sirup, and milk sugar .....	88
Candy, jelly fruits, fruit sirups, chocolate, and cocoa powder .....	4 00
Ginger bread, pies, pepper cakes, American and English biscuits .....	2 40
Pickles and sauces .....	2 40
Truffles and prepared mushrooms .....	3 20
Dried mushrooms .....	32
Fish in vinegar or oil and fish-eggs (caviare) in boxes .....	2 40
Fish, salt, and smoked (except herrings) caviare in barrels .....	88
Herrings, smoked .....	16
Salt herrings in barrels of 360 pounds weight .....	20
Herrings in small casks .....	08
Oysters, fresh, salt, and in vinegar .....	88
Oysters preserved in oil .....	2 40
4. Colonial produce:	
Coffee .....	1 20
Cocoa beans and shells .....	1 20
Vanilla and saffron .....	6 40
Cinnamon, ginger and all not specially mentioned spices .....	1 20
Cardamom .....	2 00
Sugar .....	1 60
Tobacco leaves and stalks .....	11 20
Smoking-tobacco cut, and stick-tobacco for snuff .....	21 12
Cigars .....	70 40
Snuff .....	28 00
Green and yellow tea .....	17 60
Black and red trade tea .....	12 32
5. Liquors:	
Arrack, rum, French brandy, in kegs .....	7 93
In bottles .....	54
The importation of alcohol in barrels is prohibited.	
Wine:	
In barrels .....	1 84
Sparkling .....	80
Not sparkling .....	26
Porter and beer:	
In barrels .....	80
In bottles .....	12
Vinegar:	
In barrels .....	80
In bottles .....	8
Mineral waters .....	1½

## II.—RAW PRODUCE.

1. Plants and animal produce:	
Living plants, dry plants for medicinal purposes, rags, ordinary wood material, corkwood, tar, tannin, all kinds of animals except those specially mentioned, guano, bones, horns, hoofs, hair, feathers, skins, (except, furs) wax, stearine, paraffine, tallow, fish oils, whalebones, and also all raw and animal produce used for medicinal purposes .....	free
Coal and coke:	
Imported via custom-houses in Poland .....	\$0 00½
Otherwise .....	free

## DUTIES ON IMPORTS—Continued.

## 1. Plan's and animal produce—Continued.

Wood: Fire.....	free
Fine woods, unfinished.....	\$0 04
Fine woods, finished.....	34
Finished leather:	
Small-size skins.....	6 40
Large-size skins.....	3 50
Patent leather.....	4 80
Furs: Sable, blue, fox and sea beaver.....	16 00
Musk.....	4 00
Manufactured whalebones.....	1 60
Sea sponges.....	1 20

## 2. Spinning and weaving materials:

Raw cotton.....	32
Flax, hemp, and silk (cocoons).....	free
Raw silk.....	\$0 40
Silk thread.....	4 00
Silk mixed with cotton.....	3 60
Wool:	
Uncolored.....	17
Colored.....	34
Yarn.....	3 60
Cotton yarn:	
Uncolored.....	2 60
Colored.....	3 40
Cotton wicks (lamps).....	2 60
Cotton wadding.....	88

## 3. Metals:

Magnates and all metals not specially named.....	free
Cast-iron.....	\$0 04
Iron bars and plates.....	\$0 28 to 0 40
Iron in rails.....	16
Tin plates.....	1 00
Steel.....	64
Steel in rails.....	36
Copper, brass, and other combined metals.....	48
Tin.....	16
Quicksilver.....	88
Pewter.....	4
Zinc.....	24
Zinc plates.....	48

## 4. Drugs: Potash, chlorbarium, chlorkalium, pearlash, and sulphur.....

free

## A.—Produce of gum, &amp;c:

Gum-elastic, India rubber, albumen, camphor, manna, and drugs not specially mentioned.....	\$0 24
Arabian frankincense.....	80
Benzoin, amber, perdu, and Peru balsam.....	3 20
Naphtha.....	12
Petroleum and other liquids used for same purpose.....	44
Turpentine.....	24

## B.—Colors:

Natural and botanical.....	4
In wood.....	4
Powdered.....	20
Aniline.....	3 50
Other colors.....	\$0 20 to 2 40
Extract of colors.....	\$0 40 to 3 50
Ink, ink-powder, and shoe-blackening.....	88

## C.—Chemical produce:

Oxides, salts, and acids.....	\$0 04 to 1 70
-------------------------------	----------------

## D.—Various drug and apothecary materials:

Glue:	
Fish-glue and gelatine.....	\$3 50
Common.....	8
Varnish (alcohol or oil).....	6 16
Oils:	
Olive oil and others not specially named.....	1 44
Cocanut and palm oil.....	40
Perfumed oils.....	9 60

## DUTIES ON IMPORTS—Continued.

## 4. Drugs—Continued.

Pumice stone .....	\$0 20
Phosphorus and opium .....	8 00
Ether, chloroform, and collodium .....	3 50
Aromatic cachous .....	3 50
Hops .....	88
Patent medicines and apothecary articles .....	2 40

## III.—MANUFACTURES.

## 1. Stone and various other materials:

All kind of common stone, clay, alabaster gypsum, chalk, quicklime, precious stones, pearls, granite, and corals, (unworked and unset). . .	free
Pearl-shell, unworked meerschaum, tortoise shell, artificial precious stones, stones, and mosaics not set, ground emery, brick drains and water-pipes .....	free.
Cement by way of the ports of Azof and the Black Sea, .....	free.
Otherwise .....	\$0 2
Alabaster, dressed .....	88
Gypsum and marble, dressed .....	36
Pottery-ware .....	\$ 0 16 to 1 60
Japanned-ware .....	0 60 to 2 00
Porcelain-ware .....	3 20 to 12 80
Glassware, except window and looking glass .....	0 40 to 6 40
Window glass .....	0 88 to 1 60
Looking glass .....	1 90 to 24 00

## 2. Metal manufactures:

Gold work of all kinds .....	1,056 00
Silver work of all kinds .....	70 40
Articles made of platinum, except vases, retorts, &c., used in factories. . .	528 00
Tress-work, gold, silver, and imitation gold .....	176 00
Gold and silver leaves .....	35 00
Bronze work .....	\$ 9 60 to 32 00
Copper and brass work .....	2 40
Cast iron ware .....	0 40 to 2 00
Cast steel ware .....	1 08 to 3 60
Blacksmith work .....	88
Locksmith work:	
In iron and steel, unpolished .....	2 00
In iron and steel, polished .....	3 60
Common tin work .....	2 00
Fancy tin work .....	4 00
Wire and nails .....	1 20
Wire work .....	2 40
Needles, steel and iron .....	\$ 8 00 to 16 00
Cutlery .....	4 80 to 19 20
Fire-arms .....	14 40
Scythes, sickles, straw cutters and mowers .....	35
Agricultural machinery without steam; machinery for working fibrous materials; for cloth printing; for paper manufacturing; scissors, for wool and cloth; for weaving and carding, and models of all kinds of machinery .....	free.
Tools for artists, mechanics, factories, and agriculture:	
By way of the sea .....	\$ 0 64
By way of the land .....	40
Types and printing forms of all kinds .....	24
Locomotives .....	1 00
Tenders .....	40
Locomotives, steam engines all kinds, fine engines and pumps, and all machinery not mentioned .....	24
Tin, zinc, and British metal ware not polished .....	80
Tin, zinc, and British metal ware polished .....	2 00
Pewter ware .....	64
Potals in books and sheets .....	4 80

## 3. Wood, gum, India rubber, rag and straw manufacture:

Common wood work, barrels, common baskets, carpets, mats, showware, furniture, boxes, maps, engravings, lithographs, drawings, pictures, articles of archaeology, numismatics, and natural history for collections and museums .....	free
Corkwood ware .....	\$ 1 60
Cabinet-makers and turners' work .....	\$ 0 20 to 4 80
India-rubber and gum-elastic wares .....	2 60 to 4 80

## DUTIES ON IMPORTS—Continued.

3. Wood, gum, India rubber, rag and straw manufacture—Continued.		
India-rubber clothing.....		\$17 60
India-rubber footwear.....		8 00
Paper and paper work.....	\$1 60 to	6 40
Counting-house books.....		8 80
Straw ware (not hats).....		25 60
4. Hair and leather:		
Human hair.....		19 20
Horse hair.....		1 76
Leatherware, shoes and boots:		
Except India rubber and silk.....		17 60
Silk.....		35 20
Kid gloves and kidware.....		70 40
Same cut and sewed.....		35 20
Saddlery work, boxing gloves, portfolios and books.....		12 80
5. Woven and knit goods: Samples all kinds less 1 arshine in length (28 inches).		
A.—Linen and hemp:		
Cables and cords, fishing-nets and hose.....		\$0 32
Linen batist and linen 30 per cent. of value:		
Linen and hemp weavings, such as table-cloths, towels, &c., as well as dyed and printed linen.....		20 80
Drilled linen.....		14 40
Sail-cloth, and other strong, not specially mentioned, weavings of flax, hemp, and jute (except strong linen for sacks).....		4 80
Sacks.....		24
Knit flax and hempware, except buttons, tulle, and laces.....		16 00
Oil-cloth of all kinds (except that made of silk), and articles made of oil-cloth.....		3 52
B.—Silk:		
Stuff, shawls, neckties, and ribbons made of pure silk and scraps, foulards, velvet, plush, and screens.....		160 00
Same, of half silk.....		70 40
Printed foulards.....		96 00
Silk and half-silk trimmers' work, canvas hosiery, oil-cloth and taffeta.....		32 00
C.—Wool:		
White flannels, bed-sheets, and horse-covers.....		12 80
Cloths, half cloths, and wool-satin.....		38 40
All other kinds of woolen stuff.....		27 20
Woolen dry goods, not printed, Same, printed—30 per cent. in addition to above.....	\$16 to	35 20
Stuff for flags, and gauze for millers.....		7 40
Sashes.....		7 40
Shawls, cloths, belts Cashmere, and made of terno or half terno, as well as stuff and fringes.....		96 00
Woolen stuffs for factory use.....		3 20
Woolen carpets.....		9 60
Woolen Turkish caps, per dozen.....		1 44
Trimmers' work, except buttons and laces.....		16 00
D.—Cottonware:		
Weavings, rough, bleached, and dyed (except in Adrianople red).....	\$12 16 to	35 20
Printed and dyed with Adrianople red.....	16 00 to	38 40
Velvet plush and plush ribbons.....		14 40
Knit trimmings and net-ware, chenille, canvas with or without embroidery, except buttons, tulle, and laces.....		11 20
E.—Tulle and laces:		
Tulle of all kinds for furniture and upholstery.....		12 80
Same, for other use.....		64 96
Laces, all kinds.....		96 09
F.—Turkish weavings:		
Cotton weavings, pure.....		1 60
Same, with silk.....		19 20
Same, half silk with gold or silver trimmings.....		48 00
6. Different manufactures:		
A.—All kinds of clothing (except India rubber), linen, fur, and all sorts of articles for ladies' toilets, 35 per cent. of value:		
Buttons made of bronze and other metal.....		16 00
Same, made of linen, cotton, wool, or silk.....		9 60
All other kinds.....		4 80

## DUTIES ON IMPORTS—Continued.

## 6. Different manufactures—Continued.

Ostrich feathers, and all artificial flowers, except those made of paper .....	\$192 20
Artificial pearls .....	1 32
Pearl work, artificial .....	10 56
Hats and caps made of felt and silk .....	72
Same, straw .....	105 60
Same, other material .....	41 60
Caps without fur .....	28
Hats and caps, common .....	12
Ready-made hats and caps for ladies, 35 per cent. of value.	
Umbrellas and parasols .....	\$0 24 to 1 20
B.—Perfumery and cosmetics:	
Cosmetics of all kinds .....	\$8 to 24 00
Perfumed soaps .....	4 40
Same, all other kinds .....	80
C.—Fancy goods:	
Valuable .....	35 20
Ordinary .....	10 50
Toys, pictures of natural history for children .....	10 50
Writing, drawing, tracing, and painting apparatus .....	9 60
Corals not fitted .....	96 00
D.—Different instruments:	
Astronomical instruments, thermometer, barometer, microscope, without bronze or other ornamental fittings, water and gas meters, spectacles, glasses not fitted, casks and apparatus for chemical experiments .....	free
Mathematical, physical, optical, and chemical instruments, except not specially mentioned, also photographic instruments .....	\$4 80
Scales (all kinds except decimal) .....	1 60
Scales, decimal, over 108 pounds in weight .....	24
Musical instruments, grand pianos and church organs, each .....	80 00
Small pianos and organs, for private use, each .....	48 00
Small organs, harps, &c .....	8 00
All other musical instruments .....	4 80
Watches, single watch movements and parts of watches, each .....	52
Watches and chronometers, gold and gilt, each .....	1 04
Same, of other metal, each .....	52
Clocks, wood, with wooden or copper movement, each .....	64
Tower-clocks, each .....	13 20
Movements and parts of clocks not combined .....	2 56
Astronomical clocks and chronometers .....	free
E.—Carriages and railroad cars:	
Sea and river vessels with running gear .....	free
Carriages on large and heavy springs, each .....	\$80 00
Carriages on small springs, each .....	56 00
Carts for freight .....	24 00
Carriages for children, each .....	8 00
Railroad cars, platforms, each .....	60 00
Cars, each .....	80 00
Passenger cars, third class, each .....	140 00
Same, first and second class and mail cars .....	240 00

## DIFFERENT GOODS.

Wax ware, except candles .....	free
Beds and cushions, if imported with a passenger .....	88
Candles and torches .....	80
Matches .....	1 28
Sealing-wax .....	1 60

## PROHIBITED.

Russian coins and all foreign coins not in full value.  
 Shooting powder, all kinds of fire-crackers, and purified saltpeter.  
 Guns, shells, &c., air-guns, walking-canes with swords.  
 Playing-cards.  
 Beds and cushions as articles of trade.  
 Hair-dye.  
 Brandy and alcohol in barrels.



Russian telegraph statistics—from 1866 to 1876.

	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.
Length of the lines.....miles.	23,165	23,527	24,987	26,795	29,396	30,898	45,372	43,232	50,966	54,168	56,886
Length of the wires.....do.	43,279	45,386	47,578	50,654	56,388	79,026	90,362	93,379	101,535	107,492	113,239
Number of bureaux:											
Of the state.....	303	364	400	445	504	571	649	681	701	767	844
Of the railways and the public.....	160	160	166	204	210	470	661	733	901	966	1,126
Day and night service.....	136	160	166	189	291	435	670	741	805	868	1,014
Day service.....	202	205	220	241	204	327	355	420	456	462	490
Temporary service.....	105	159	180	219	219	259	305	313	341	403	460
Number of apparatus:											
Morse system.....	831	890	942	963	1,170	1,315	1,489	1,607	1,656	1,777	1,936
Hughes system.....	6	14	2	27	41	56	76	76	98	100	100
Other systems.....	2	2	2								
Number of employees.....	3,313	3,240	3,453	3,728	4,135	4,662	5,331	6,013	6,393	6,791	7,353
Number of dispatches:											
Interior service:											
Sent taxed.....	1,024,593	1,197,260	1,567,897	1,875,391	2,085,875	2,373,728	2,528,316	2,631,004	2,920,071	3,237,935	3,508,528
Sent free.....	122,711	89,272	1,061,110	123,051	146,737	176,966	191,890	183,614	196,097	240,200	283,472
International service:											
Sent taxed.....	124,584	147,376	169,862	191,214	216,104	228,568	246,859	274,813	305,537	314,014	327,454
Sent free.....	4,394	4,367	4,053	4,716	5,414	5,529	6,992	7,723	7,431	8,467	9,109
Received taxed.....	125,946	147,188	170,401	192,540	228,371	230,873	256,479	277,274	307,130	306,767	324,860
Received free.....	4,123	3,914	3,728	4,509	5,104	5,930	8,142	6,600	6,666	12,006	12,069
Taxes received:											
Interior service.....dollars.	919,536	1,066,863	1,175,346	1,350,921	1,465,543	1,625,427	1,687,473	1,848,275	1,888,423	1,938,007	1,972,840
International service.....do.	174,352	253,538	233,099	296,378	314,643	317,151	372,402	432,406	496,896	498,645	622,219
Divers receipts.....	17,990	23,592	18,507	42,243	21,486	30,718	34,764	34,243	31,011	31,917	35,517
Cost of administration:											
Personal.....dollars.	462,760	464,000	467,563	506,808	630,154	723,523	911,863	1,098,653	1,224,944	1,315,853	1,396,962
Divers expenses.....do.	568,756	568,504	444,547	513,868	565,851	588,958	690,709	724,457	661,035	731,491	858,290

## AZOF PORTS.

*Imports at the Azof ports during the year 1878.*

## TAGANROG AND ROSTOFF.

Articles.	Quantity.	Articles.	Quantity.
Raisins.....poods.	44, 525	Beer and porter.....bottles	13, 093
Cement.....do.	74, 069	Petroleum.....poods	15, 026
Sulphur.....do.	2, 950	Soda.....do.	1, 783
Coals.....do.	18, 000	Olive oil.....do.	71, 018
Yellow wax.....do.	194	Jute bags.....do.	2, 628
Rice.....do.	1, 498	Fire-bricks.....do.	68, 975
Green fruits.....do.	5, 602	Minerals.....do.	52, 652
Oranges and lemons.....do.	120, 117	Iron.....do.	3, 470
Olives.....do.	14, 553	Tin.....do.	2, 062
Loansh beans.....do.	84, 483	Steel.....do.	79, 000
Walnuts and hazel-nuts.....do.	201, 281	Rosin.....do.	2, 228
Dried fruits.....do.	89, 685	Empty bottles.....number	106, 971
Almonds.....do.	1, 083	Joiners' work.....poods	2, 652
Cheese.....do.	350	Preserves.....do.	345
Coffee.....do.	5, 038	Valuable wood.....do.	5, 551
Pepper.....do.	282	Paints.....do.	2, 470
Tobacco in leaf.....do.	10, 584	Iron, manufactured.....do.	8, 020
Tea.....do.	3, 014	Tools.....do.	1, 519
Rum.....do.	554	Machinery.....do.	14, 550
Liquors.....bottles	1, 473	Canvas.....do.	2, 174
Wine.....do.	6, 715	Sundries.....do.	110, 100
Wine in casks.....poods.	43, 364		

Total value of imports for 1878, 5,153,800 rubles; total value of imports for 1876, 5,446,118 rubles; amount of duties paid, 1,162,997 rubles.

The weights are stated in poods of 36 pounds.

There were imported 87,682,000 rubles in gold, and 706,868 rubles in paper money.

## BERDIANSK.

Articles.	Quantity.	Articles.	Quantity.
Coals.....poods	34, 260	Walnuts and hazel-nuts.....poods.	1, 912
Oranges and lemons.....do.	14, 630	Coffee.....do.	5, 733

*Exports from the ports of the Azof Sea during 1878.*

Articles.	Taganrog and Rostoff.	Mariopol.	Berdiansk.	Yisk.
Wheat.....chetwert.	2, 938, 889	382, 190	1, 484, 411	217, 400
Rye.....do.	433, 227	4, 100	23, 510	12, 400
Barley.....do.	451, 912	152, 965	121, 490	63, 749
Maize.....do.	10, 882		692	
Oats.....do.	17, 072		16, 110	159, 431
Linseed.....do.	988, 782	42, 940	17, 781	6, 288
Rapeseed.....do.	129, 941	26, 310	76, 096	
Tallow.....poods	140, 186			
Butter.....do.	34, 446			
Washed wool.....do.	183, 325	2, 047		23, 600
Flour.....do.	21, 430			
Rice.....do.	1, 520			
Solder lead.....do.	4, 100			
Boxwood.....do.	294, 904			
Coals (anthracite).....do.	47, 000			
Caviare.....do.	76, 221			
Fish (dried).....do.	3, 600			
Macaroni.....do.	868			
Sundries.....do.	58, 500			
Total value in rubles.....	64, 105, 854	5, 512, 940	20, 471, 800	5, 915, 000
Total value in rubles in 1876.....	24, 043, 490	3, 980, 926	8, 393, 460	1, 038, 000

*Navigation at the ports of the Azof Sea during the year 1878.*

Flag.	Taganrog and Rostoff.						Berdiansk.					
	Steam.		Sail.		Total.		Steam.		Sail.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
English .....	324		31		355	217,616	46		1		47	31,535
Belgian .....	1				1	588						
Danish .....	1				1	698						
Austrian .....	2		55		57	15,461			15		15	3,962
French .....	4		4		4	4,886						
German .....	3		4		7	3,570	1		2		3	1,295
Italian .....	3		119		122	39,750			251		251	71,536
Greek .....	2		578		580	111,141			109		109	21,225
Turkish .....			53		53	4,522			33		33	915
Swedish .....	3		17		20	6,203						
Russian .....			15		15	1,685			6		6	1,064
American .....												
Total .....	343		872		1,215	406,120	47		417		464	131,532
Total 1876 .....					738	252,993					302	101,059

Flag.	Yleek.						Total.	
	Steam.		Sail.		Total.			
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
English .....	22		2		24	14,760	426	263,911
Belgian .....							1	588
Danish .....	1				1	677	2	1,375
Austrian .....			7		7	2,025	79	21,451
French .....							4	4,886
German .....							10	4,865
Italian .....			9		9	2,625	382	113,911
Greek .....			69		69	15,780	758	148,146
Turkish .....			13		13	570	99	6,007
Swedish .....							20	6,203
Russian .....			3		3	885	24	3,634
American .....			1		1	353	1	353
Total .....	23		104		127	37,685	1,806	575,337
Total 1876 .....					17	4,438	1,057	358,490

## NICOLAIEFF.

*Imports at Nicolaieff during the year 1878.*

Articles.	Quantity.	Value.*
Coals .....	tons 17, 242	.....
Coffee .....	cwt. 340	.....
Cotton goods .....	do 11	.....
Fruits, fresh .....	do 1, 923	.....
Iron, raw .....	do 4, 052	.....
Leather, manufactured .....	do 19	.....
Machinery .....	do 1, 176	.....
Olive oil .....	do 319	.....
Pepper .....	do 27	.....
Rice .....	do 731	.....
Silk goods .....	do 1½	.....
Spirits .....	do 43	.....
Tea .....	do 1	.....
Wine:		
In casks .....	do 376	.....
In bottles .....	dozen 14½	.....
Woolen goods .....	do 23	.....
Total value in rubles, 1878 .....		311, 940. 00
Total value in dollars, 1878 .....		232, 931. 00
Total value in rubles, 1876 .....		2, 511, 914. 00
Total value in dollars, 1876 .....		1, 878, 910. 67

\* Value of items not obtained.

*Exports from Nicolaieff during the year 1878.*

Articles.	Quantity.	Value.	Remarks.
	<i>Tchetverts.</i>	<i>Rubles.</i>	
Wheat .....	2, 154, 670	The value	Exported to England and continental ports.
Rye .....	728, 357	of each	
Barley .....	549, 659	item not	
Oats .....	71, 532	obtained,	
Linseed .....	113, 667	but of the	
Rapeseed .....	20, 716	total val-	
Eunison .....	31, 256	ue of 19,	
Millet .....	3, 660	713, 870.	
Wool .....		147, 627	
Sundries .....		118, 229	
Total rubles, 1878 .....		19, 979, 726	
Total dollars, 1878 .....		14, 944, 885	
Total rubles, 1876 .....		10, 005, 900	
Total dollars, 1876 .....		7, 484, 413	

*Navigation at the port of Nicolaieff in 1878.*

Flag.	Steam.	Sail.	Tons.
	No.	No.	No.
Austrian .....	.....	45	18, 280
Belgian .....	8	.....	10, 036
British .....	294	8	252, 496
Danish .....	1	.....	990
Dutch .....	9	.....	9, 464
French .....	1	.....	1, 140
German .....	8	5	9, 782
Greek .....	.....	73	22, 660
Italian .....	7	33	16, 410
Norwegian .....	1	2	9, 976
Russian .....	1	1	1, 318
Samian .....	1	4	576
Turkish .....	1	20	2, 378
Total in 1878 .....	329	196	355, 396
Total in 1876 .....	114	108	143, 776

NOTE.—The clearances of vessels I have not been able to ascertain. On account of the shallowness of the water on the Orchakor bar, many vessels load part cargo at Nicolaieff, and come to Odessa to fill up, and thus save expense of lighterage.—*U. S. Consul at Odessa.*

## ODESSA.

*Report, by Consul Dyer, on the trade and commerce of Odessa, for the year 1878.*

## EXPORTS.

*Grain.*—The year began with a stock of grain on hand of almost 708,000 quarters, or 5,500,000 bushels. In the hope of an early raising of the blockade, much speculation took place and prices went to a high figure. When the port was finally opened, and ships arrived, exportation commenced and continued on a scale unknown in the history of Odessa. As will be seen by the accompanying table, the exports amounted to the enormous sum of 85,815,013.25 rubles. There was exported during the year, of grain, 6,685,536 quarters, or 53,484,288 bushels; the greatest amount previously exported being in 1870, when 3,900,000 quarters, or 31,200,000 bushels, were exported.

*Wool.*—The price of wool started high early in the season under the influence of purchases by Russian manufacturers, who bought for military purposes. With the cessation of the war this demand was very restricted and prices rapidly declined until the best article was a drug upon the market at the usual price of the more inferior qualities. Finally, late in the season, the inferior articles were scarcely salable at any price. Under these circumstances a class of wools was bought and exported to the United States that had not previously been shipped there. These superior classes of wools were purchased at a price, in the depreciated currency of this country, that readily enabled them to enter the United States under the three-cent duty, and caused a sensation in the wool trade not only in America but in England. There are three kinds of wool grown here :

1. *Merinos*, which are by far the most important and valuable. The sheep were originally imported from Spain, and have since been crossed with the French Rambouilles, and the Tazor Nequette breeds. These wools are bought principally for the Austrian and Silesian markets, a small quantity going to France. But little of them goes to England, and perhaps none to the United States.

2. *Douskai wools*, grown in the Crimea and southeastern provinces of Russia, and exported for carpets and other like purposes to England and the United States. This wool in 1878 was very largely sent to the United States.

3. *Melitch wools*.—This is the wool which generally goes to the United States for carpet manufacturing purposes. It is clipped twice a year, but the supply is limited and the price very low. This year such wools were almost valueless, and the Douskais largely took their places at the same prices.

There were exported from Odessa during the year 1876, 106,042 pounds of washed wool and 228,217 pounds of unwashed, making a total of 334,259 pounds, of the value of 2,062,883 rubles, against 55,478 pounds of washed, and 216,070 pounds of unwashed in 1878, making a total of 271,548 pounds, of the value of 2,067,267 rubles. Thus the number of pounds exported in 1878 was less by 62,711 pounds than in 1876, and the value thereof 4,394 rubles more.

The wool which went north by railway is not included in this statement, but it is known that there was much movement in that direction.

## IMPORTS.

The imports for the year 1878 show a loss as compared with 1876 (the port having been closed in 1877). This may be attributed to the depreciation of the ruble and the increased duty in consequence of this, and the additional fact that duties were payable in gold. It will be observed that the importation of coal surpassed by more than 10,000,000 pounds that of 1876. This was caused by a report of an intention to place a duty upon that article. The intention was, however, abandoned, if ever entertained.

The total value of imports was 44,478,234 rubles as compared with 1876, 49,429,578 rubles, showing a loss of 4,951,344 rubles.

The average of importations from 1871 to 1876 having been 46,500,000 rubles, the loss on this item then being 2,000,000 rubles below an average. It should also be considered that in 1878 the ruble was depreciated from 35 to 40 per cent. as compared with a depreciation in previous years of 15 to 18 per cent. Naturally the war was not without effect on this interest. Many wealthy families found homes elsewhere, many people were impoverished, and increased taxation levied by the imperial government, loss of rents, &c., have reduced the ability of the purchasing classes to purchase imported goods in large quantities.

## COTTON.

I notice that the recent shipment of cotton from the United States to South Russia by way of Sevastopol has caused some remark. I do not, however, think that the trade in this article can greatly develop. Within a few months a duty has been placed on raw cotton of 40 kopecks, equal to 30 cents, on each 36 pounds, or almost one cent per pound. Cotton from the Central Asian khanates is excepted from the operation of this law.

It is hoped that this duty will have the effect to largely develop the culture of cotton in Central Asia and the Caucasus. I can see no reason why the Caucasus should not produce abundantly in this article. The oleander, the magnolia, fig, and olive grow abundantly there, as does the mulberry tree. The climate in the valleys is warm and genial, and the soil constantly enriched by the wash from the mountain sides. Whether a class of labor could be had that would give that unremitting care, toil, and attention, without which cotton cannot be produced, is quite another question. I must confess that I saw nothing during my travels in that country that leads me to believe that such labor is available. For military and sporting life they are, perhaps, unexcelled, but for a life of husbandry I should think them not adapted, either by customs, habits, traditions, or experience. Hitherto Central Asian cotton has only been used to mix with American and Egyptian cotton, but it is now claimed that at Tuspan, in Eastern Turkistan, a cotton is grown equal to the American article, and it is expected that the encouragement of the present protective tariff will make Russia independent of America in this regard.

The plant is said to obtain a growth of 9 feet 4 inches in height and the stalk a thickness of 2½ inches in diameter, and even more; the pods beautifully filled and developed. The staple is said to be soft, long, and silky, and has great repute in the Chinese markets. The crop matures and is ready for market the 1st of August. The highest price for the best article of this cotton at Tuspan is 7 copecks a pound, equal to 5 cents the pound. The second and shorter grades sell at from one-half to three-

fifths the above price. It is cultivated by Chinese, and the annual yield is about 36,000,000 pounds, or 72,000 bales of 500 pounds each. This cotton may be said to supply about the same percentage of the Russian demand as American cotton supplied to England at the beginning of this century. The annual consumption of Russia is from 126,000,000 to 150,000,000 of pounds. Tuspan is said to be very productive in all respects. Apricots ripen in May, apples the end of May, and grapes in July. The commoner kinds of grapes are used for food for horses. Sugar-cane also grows luxuriantly there.

#### PETROLEUM.

The American article continues to control this market, and will, perhaps, for some years to come. The wells at Baku, on the Caspian Sea, are being worked with profit and the business generally developed, but until the difficulties of transportation are overcome the article cannot compete with that from America.

An effort is being made to connect the oil region on the east coast of the Caucasus with the Black Sea at Poti by a pipe system, and I am told that the scheme will be successful at no distant day. Even in that case the question of competition will not be solved, for much remains to be done to develop the industry to the point of successful competition. The crude oil at Baku is very impure, refining only from 25 to 27 per cent. of pure petroleum.

A railway is about completed connecting the wells, from 10 to 30 miles from the coast, with the Caspian Sea. This will lessen the cost of transit, but the long voyage up the Volga and down the Don to the Azov and Black Sea and thence to the Mediterranean taxes the article much more than it can endure in a continental market.

A company is now commencing to prospect the region east of the Straits of Kerch, in the Kuban districts, for petroleum, but nothing can be said of the prospects of success. The locality has been abandoned for ten years, but the place is supposed to be rich in the article, and the company has the capital and the enterprise to prosecute the work with great energy.

Complaints are heard here, as elsewhere in Europe, of the bad quality of petroleum sent from America, and exporters would consult their interest by taking care that such complaints should be without foundation in fact.

These remarks are equally applicable to all classes of exporters. The standard of excellence should be maintained if they hope to succeed.

Hereto annexed I have now the honor to transmit tables exhibiting the navigation, trade, and commerce of Odessa and the South Russian ports for the year 1878, as follows, viz:

No. 1.—Exports from Odessa, showing a total of \$64,189,629, as compared with \$40,730,861 in 1876.

No. 2.—Imports at Odessa, showing a total of \$33,269,719, against \$36,973,325 in 1876.

No. 3.—Navigation at the port of Odessa, showing the arrival of 1,739 vessels, with a tonnage of 1,307,622 tons, against 1,187 vessels, with 939,686 tons, in 1876.

No. 4.—Exports from Nicolaief of the value of \$14,949,835, against \$7,484,413 in 1876.

No. 5.—Imports at Nicolaief of \$232,931, against \$1,873,910.67 in 1876.

No. 6.—Navigation at Nicolaief, showing 525 ships of 355,396 tons, against 222 of 143,776 tons in 1876.

No. 7.—Exports from the Azof ports as follows: Taganrog and Rostoff, 64,105,854 rubles, against 24,645,490 in 1876; Mariopol, 5,542,940 rubles, against 3,980,926 in 1876; Berdiansk, 20,471,800 rubles, against 8,393,460 in 1876; Yiesk, 5,915,000 rubles, against 1,038,000 in 1876.

No. 8.—Imports at the Azof ports as follows, viz: Taganrog, including Rostoff and Berdiansk, there being no importations at the other ports, 5,153,800 rubles, against 5,446,118 in 1876.

No. 9.—Navigation at the Azof ports, showing 1,806 arrivals of vessels of 575,337 tons, against 1,057 with 354,490 tons in 1876.

No. 10.—Totals of cereals exported from all South Russian ports, 124,236,336 bushels (this including seeds also and 55,711,248 bushels from Odessa), against 27,565,856 in 1876.

No. 11.—Total value of cereals and seed exported from South Russian ports, \$133,570,070, against \$70,512,825 in 1876.

No. 12.—Movement of vessels at the South Russian ports 4,270, with tonnage of 2,238,055 tons, against 2,466 of a tonnage of 1,449,952 in 1876.

No. 13.—Value of imports at South Russian ports, showing \$42,925,932 in 1876, against \$37,358,092 in 1878.

I have not been able to procure the figures for the smaller ports, such as Sevastopol, Eupatoria, Theodosia, Kerch, Poti, and Batum, but their business has been exceedingly small—their imports almost nothing, and their exports insignificant.

LEANDER E. DYER.

UNITED STATES CONSULATE,  
Odessa.

*Imports at Odessa during the year 1878.*

Articles.	Quantity.	Value.	Whence.
		<i>Rubles.</i>	
Tea .....	30,998.7	1,658,904.00	China and England.
Pepper .....	87,984.36	230,201.00	England and various.
Rice .....	154,510.87	431,815.00	Egypt, England, and United States.
Coffee .....	76,910.9	1,252,258.00	France, England, and Arabia.
Oil .....	258,181.6	2,156,932.00	France, Italy, and Greece.
Wine:			
In casks .....	56,392.28	465,945.00	France, Germany, &c.
In bottles .....	15,240	24,700.00	Do.
Champagne .....	47,392	193,704.00	France.
Do .....	13,815	31,377.00	Do.
Spirits .....	2,112.6	191,551.00	France, England, and Holland.
Fruit:			
Fresh .....	407,487	1,580,783.00	Southern ports.
Preserved .....	339,002.20	1,092,352.00	Do.
Tobacco:			
Leaf .....	46,891.81	1,982,425.00	Turkey, &c.
Manufactured .....	160.18	31,778.00	Do.
Hides, worked .....	4,955.13	244,846.50	France, England, &c.
Raw cotton .....	280,060.32	1,610,005.00	Egypt and America.
Spun cotton .....	12,405.2	695,144.00	England, France, &c.
Gold, manufactured .....	41.14	165,687.00	Do.
Tin, plate and sheets .....	33,416.12	160,687.00	Do.
Iron:			
Raw .....	1,607,971.35	2,644,548.00	Do.
Worked .....	164,118.9	396,920.00	Do.
Leather, worked .....	958.7	78,144.00	Do.
Cotton, worked .....	1,280	63,175.00	Do.
Do .....	241,083.48	242,273.00	Do.
Silk, worked .....	201.16	196,990.00	Do.
Linen, worked .....	464,816.5	4,708,813.00	Do.
Woolen, worked .....	1,079.17	67,276.00	Do.
Sundry goods paying ad valorem, poods .....	49,704	51,298.00	Various.



*Imports at Odessa during the year 1878—Continued.*

Articles.	Quantity.	Value.	Whence.
Matches .....poods..	22, 671	181, 370. 00	Italy, France, &c. England.
Coals .....do.	23, 798, 317	4, 607, 601. 00	
Total value merchandise, rubles, 1878 .....		44, 478, 234. 00	
Total value merchandise, dollars, 1878 .....		33, 269, 719. 00	
Total value merchandise, rubles, 1876 .....		49, 429, 578. 00	
Total value merchandise, dollars, 1876 .....		36, 973, 325. 00	

## IMPORT OF MONEY.

	Value.	Whence.
	<i>Rubles.</i>	
Gold, Russian .....	272, 228. 00	Various places. Do. Do. Do. Do.
Gold, foreign .....	207, 694. 00	
Silver, Russian .....	14, 615. 00	
Silver, foreign .....	26. 00	
Paper money .....	11, 850, 061. 00	
Total of money .....	11, 844, 626. 00	
Total value of duties paid on imports (1878) in rubles .....	4, 510, 244. 00	
Total value of duties paid on imports (1878) in dollars .....	3, 373, 662. 00	
Total value of duties paid on imports (1876) in rubles .....	5, 652, 156. 00	
Total value of duties paid on imports (1876) in dollars .....	4, 227, 812. 00	

*Exports from Odessa during the year 1878.*

Articles.	Quantity.	Value.	Where exported.
		<i>Rubles.</i>	
Wheat .....chetverts..	3, 747, 813	44, 937, 756. 00	England, Italy, France, &c.
Rye .....do....	1, 963, 577	11, 781, 522. 00	England.
Peanes .....do....	17, 328	138, 624. 00	Continental ports.
Corn .....do....	731, 083	2, 924, 332. 00	England and continent.
Oats .....do....	478, 855	1, 438, 566. 00	France.
Millet .....do....	15, 215	45, 645. 00	England and continent.
Barley .....do....	1, 666, 492	6, 665, 870. 00	Do.
Linseed .....do....	100, 988	1, 211, 874. 00	Continent.
Rape seed .....do....	245, 691	2, 456, 915. 00	Do.
Flour .....do....	214, 187	2, 998, 618. 00	Turkey, Greece, and England.
Wax .....poods..	195	3, 900. 00	Various.
Cattle .....head..	25, 789	773, 670. 00	Turkey, Greece, and Malta.
Biscuits .....poods..	1, 192	3, 577. 50	Turkey.
Pine boards .....do....	3, 140	3, 140. 00	Do.
Old iron .....do....	32, 484	9, 745. 20	England, &c.
Images .....do....	360	10, 815. 00	Turkey and Greece.
Caviare .....do....	19, 695	512, 076. 50	England and continent.
Dry hides .....do....	1, 714	6, 856. 00	Do.
Silkworms .....do....	2, 355	235, 525. 00	France.
Rope .....do....	51, 040	102, 081. 50	Various.
Starch .....do....	8, 485	84, 850. 00	Do.
Books .....do....	141	2, 830. 00	Turkey and Greece.
Oak staves .....do....	121, 167	12, 116. 70	Various.
Butter .....do....	33, 395	200, 370. 00	Southern ports.
Oil .....do....	3, 815	19, 890. 00	Various.
Macaroni .....do....	9, 229	27, 688. 50	Turkey and southern ports.
Soap .....do....	31, 528	94, 584. 00	Southern ports.
Empty sacks .....do....	856	10, 272. 00	England, &c.

*Exports from Odessa during the year 1878—Continued.*

Articles.	Quantity.	Value.	Where exported.
		<i>Rubles.</i>	
Bran.....poods..	303,535	607,070 00	Various.
Sheep and goats.....head..	123,780	1,237,890 00	Turkey and southern ports.
Wheels.....pieces..	7,645	7,645 00	Do.
Cigarettes.....poods..	243	4,853 00	Sundry ports.
Beeswax.....do.	62,468	124,936 00	Do.
Millet gruel.....do.	59,715	238,860 00	Do.
Beer.....do.	9,108	9,108 00	Turkey.
Feathers.....do.	102	1,224 00	Continents, &c.
Salt fish.....do.	27,694	110,778 00	Sundry ports.
Tallow.....do.	21,064	105,323 75	England and France.
Corned beef.....do.	12,062	38,588 00	England and continents.
Spirits.....do.	35,391,383	707,827 65	Southern ports.
Pitch.....do.	60	12,142 00	Do.
Cheese.....do.	16,776	50,328 00	Sundry ports.
Turpentine.....do.	1,581	6,324 00	Do.
Tobacco.....do.	28,632	71,580 00	Do.
Beans.....do.	318,426	955,278 00	Do.
Tea.....do.	2,101	84,040 00	Southern ports.
Washed wool.....do.	55,478	554,780 00	England, France, America, and Austria.
Unwashed wool.....do.	216,071	1,512,497 00	Do.
Leather.....do.	328	3,280 00	Sundry.
Raw silk.....do.	2,341	351,240 00	France.
Refined sugar.....do.	15,156	75,783 00	Sundry ports.
White sugar.....do.	105,393	421,673 00	Do.
Gray sugar.....do.	624	2,185 00	Do.
Yellow sugar.....do.	3,189	8,770 00	Do.
Sundries.....do.		1,763,298 00	Do.
Gold from private people.....		39,297 00	} Various places.
Gold from private banks.....		309 00	
Silver from private people.....		750,146 00	
Paper from private people.....		1,953,924 00	
Paper from government bank.....		1,916 00	
Paper from private banks.....		33,306 00	
Total value in rubles.....		2,778,890 00	
Total value of merchandise in rubles, 1878.....		85,815,013 00	
Total value of merchandise in dollars, 1878.....		64,189,629 00	
Total value of merchandise in rubles, 1876.....		55,491,630 00	
Total value of merchandise in dollars, 1876.....		40,730,861 00	

*Navigation at the port of Odessa in 1878.*

Flag.	ENTERED.					
	Steam.		Sail.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Russian.....	312	302,846	4	201	316	303,047
English.....	660	616,446	2	1,351	662	617,797
Dutch.....	10	8,968			10	8,968
Belgian.....	19	20,616	4	2,801	23	23,417
Austrian.....	72	42,050	139	40,023	211	82,073
German.....	18	13,323	1	398	19	13,721
Norwegian.....	15	12,721	9	3,597	24	16,318
Italian.....	63	65,181	154	42,078	217	107,859
Greek.....			112	15,098	112	15,093
Turkish.....			55	2,829	55	2,829
French.....	74	107,608			74	107,608
Danish.....	5	4,690			5	4,690
Spanish.....	1	598	1	236	2	834
Swedish.....	5	2,720			5	2,720
Moldavian.....			3	474	3	474
Wallachian.....			1	174	1	174
Total.....	1,254	1,197,767	485	109,855	1,739	1,307,622
Total, 1876.....	659	770,897	528	168,789	1,187	939,686
Total, 1875.....	576	639,207	379	107,968	955	747,175
Gain in 1878 over 1876.....	595	426,870			552	367,936

*Navigation at the port of Odessa in 1878—Continued.*

Flag.	CLEARED.					
	Steam.		Sail.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Russian .....	330	268, 064	20	2, 262	350	265, 326
English .....	656	618, 755	12	5, 862	668	625, 007
Dutch .....	8	6, 881	.....	.....	8	6, 881
Belgian .....	18	18, 858	.....	.....	18	18, 858
Austrian .....	76	45, 258	123	44, 763	199	90, 021
German .....	17	12, 192	1	450	18	12, 642
Norwegian .....	15	12, 788	8	2, 278	23	15, 066
Italian .....	56	62, 300	146	55, 052	202	117, 352
Greek .....	.....	.....	102	13, 359	102	13, 359
Turkish .....	.....	.....	54	2, 388	54	2, 388
French .....	74	107, 673	.....	.....	74	107, 673
Danish .....	4	3, 542	.....	.....	4	3, 542
Spanish .....	1	600	1	235	2	835
Swedish .....	7	4, 261	.....	.....	7	4, 261
Moldavian .....	.....	.....	1	290	1	290
Total .....	1, 262	1, 157, 182	468	126, 929	1, 730	1, 284, 111
Total, 1876 .....	638	718, 008	520	170, 800	1, 158	888, 808
Total, 1875 .....	566	627, 334	372	83, 282	938	710, 616
Gain in 1878 over 1876 .....	624	438, 174	.....	.....	572	294, 303

## ODESSA AND THE SOUTH RUSSIAN PORTS.

*Annual report of the trade, commerce, and navigation of Odessa and the South Russian ports for the year 1879.*

As will be seen from the accompanying tables, marked from No. 1 to No. 12, respectively, the trade and commerce of this part of the Russian Empire was, during 1879, of a comparatively healthy and satisfactory nature.

It must be borne in mind that the comparison with 1878 is not a comparison with an ordinary year, inasmuch as in 1877, during the war, the ports of South Russia were blockaded, and much of the business of 1877 was postponed to 1878.

It is supposed that a larger percentage of the produce of the country was exported in 1879 than has been done in former years, and that the stocks in the country January 1, 1880, were exceedingly light. This was in consequence of the high ruling prices, and, if this supposition is true, the year 1880 will probably show a large falling off in its exports.

## ODESSA.

Table herewith inclosed marked No. 1 shows the exports, amounting to 65,652,088 rubles, against 85,815,013 rubles in 1878, making a loss of 20,162,925 rubles for the year 1879.

Table No. 2 shows imports of 44,535,150 rubles, against 44,478,234 rubles in 1878, making a gain for the year of 56,916 rubles.

Table No. 3 shows the entry of 1,333 ships, with a tonnage of 1,041,460 tons, against 1,739 ships in 1878, with tonnage of 1,307,622 tons, making a loss of 406 ships and 266,162 tons. There cleared 1,345 ships, with tonnage of 1,062,281 tons, against 1,730 ships, tonnage of 1,284,111 tons in 1878, showing loss of 385 ships and 221,830 tons.

## THE AZOFF PORTS.

Table No. 4 shows the exports from the Azoff ports as follows:

1. Taganrog and Rostoff, 61,443,777 rubles, against 64,105,854 rubles in 1878, or a loss of 2,662,077 rubles.
2. Mariopol, 4,556,671 rubles, against 5,542,940 rubles, or a loss of 986,269 rubles.
3. Berdiansk, 14,332,705 rubles, against 20,471,800 rubles, or a loss of 6,139,095 rubles, as compared with 1878.
4. Yiesk, 4,186,910 rubles, against 5,915,000 rubles, or a loss of 1,728,090 rubles.
5. Yanischek, 1,224,595 rubles; in 1878 not reported.

Table No. 5 shows the imports at the Azoff ports for the year at 7,803,000 rubles, against 5,153,800 rubles in 1878, or a gain in 1879 of 2,649,200 rubles.

Table No. 6 shows the entry at the Azoff ports of 1,299 ships, with tonnage of 287,174 tons, against 1,806 ships, with 575,337 tons in 1878, or a loss of 507 ships and 288,163 tons.

I refer to the accompanying report of Mr. Godfrey M. Hoyland, consular agent at Taganrog, as to the causes of so large a shrinkage in the commerce of the Azoff ports.

## NICOLAIEF.

Table No. 7 shows the exports from Nicolaif, amounting to 34,029,480 rubles, against 19,979,726 rubles in 1878, or a gain for 1879 of 14,049,754 rubles, caused by a large crop, in comparison with that of 1878, and by enormous prices.

Table No. 8 shows imports at Nicolaif of 651,110 rubles, against 311,904 rubles in 1878, or a gain of 339,170 rubles.

Table No. 9 shows 508 ships entered at Nicolaif in 1879, against 525 in 1878, a loss of 17 ships. Tonnage is not reported.

Table No. 10 is a comparative statement of navigation at all the South Russian ports, showing 2,959 ships with 1,680,634 tons in 1879, against 4,070 ships with 2,238,355 tons in 1878, or a loss of 1,111 with 557,721 tons. The clearances are only reported for Odessa, and have been mentioned.

Table No. 11, showing exports of cereals, grains, and flour from all the South Russian ports, amounting to 15,434,581 chetwerts, of 6 bushels each, against 20,882,111 chetwerts in 1878, or a loss of 5,447,530 chetwerts on all articles except corn and millet, and on those articles a gain of 293,993 chetwerts.

Table No. 12, showing comparative statements of the values of exports and imports at the South Russian ports. This table shows total exports of 184,201,631 rubles, against 201,830,333 rubles, or a loss for 1879 of 17,628,702 rubles. In imports it shows 52,989,260 rubles, against 49,943,974 rubles, or a gain for 1879 of 3,045,286 rubles.

I have again to regret that figures of an official character, upon which is based this trade and commercial report, are obtainable at so late a date as to make any remarks that would be of particular interest impossible.

## EXTENSION OF AMERICAN TRADE.

I have used extraordinary efforts in this direction, and have had partial success. I am impressed with the idea that a contemplated visit to the United States in the autumn will enable me to place this question in such a light before some influential houses as to induce them to make a more vigorous effort to obtain success.

During the year Messrs. McCormick & Co. have opened a house here for the sale of their self-binding harvester, with agencies throughout Russia. I feel convinced that they are the pioneers of a large colony.

#### DUTY ON MACHINERY.

A duty on farming implements and machinery is contemplated, but I am informed that it is for the moment deferred for a time.

LEANDER E. DYER.

UNITED STATES CONSULATE,  
Odessa, May 17, 1880.

---

[Inclosure in foregoing.]

#### *Report by Consular Agent Hoyland.*

I have the honor to inclose you a note of the movement of shipping, the rates of freight and exchange, and a list of imports and exports of the Azoff during the year 1879.

The ice cleared away during the month of February and the navigation was one of the earliest known for the last twenty years.

The year 1879, which opened under ordinary aspects, towards the month of June gave signs of proving an active and profitable season for all people. The failure of the crops abroad, and the prospects of a promising harvest in these districts, made many imagine that the long looked for time had at last arrived, and merchants anticipated large supplies and moderate prices here, with a good demand and high prices abroad. As the season advanced, however, and harvesting time approached, complaints of the crops began to be heard on all sides, and, as only too often has happened of late years, when the reaping commenced the rendering fell far short of what was expected, and in most parts the harvest was exceedingly small, and in some places rendered little more than the seed. The beetle (*Anisoplia Austriaca*), although apparently stamped out in many places, caused great damage in some parts. The harvest on the whole was far below an average, and although from the list of exports it would at first glance appear as if there had been abundance of stuff for shipment, yet such was not the case; but I will recur to this further on.

The imports of 1879 compare favorably with those of 1878 and show an increase in round numbers of 2,700,000 rubles; but when taking into account the difference of exchange they are still below those of 1876, or previous to the war. The only falling off perceptible is in things for which there are manufactories near our city, such as in bottles, joiners' work, tools, iron work, and petroleum. It is worth note that whereas in 1878 there was no import of pig-iron but a greater import of iron work, the latter in 1879 fell off, but there was an import of 15,301 poods of pig-iron. Thus it may fairly be presumed that the factories which purchased the pig-iron supplied the iron work. The falling off in cement was very great, but is probably due to the railways not being purchasers.

The import of gold through the custom-house shows an increase over 1878, and it must be borne in mind that the small vessels which come here and purchase grain for their own account invariably bring gold with them of which no return can be kept, so that the amount of gold imported in 1879 must greatly exceed that of 1878.

The exports for 1879 are considerably below those of the previous year, notwithstanding that proprietors and peasants strained every nerve to bring to market whatever they had for sale, in order that they might take advantage of the prices which ruled higher than has ever been previously known. On reference to the annexed list of exports it will be perceived that from Taganrog and Rostoff alone the shipments of wheat were in round numbers 800,000 chetwerts less than in 1878, and from Berdiansk, Marianople, and Yeisk together the difference was 900,000 chetwerts. All other articles, with the single exception of washed wool, which shows an increase of only 2,700 poods, fell far short of the exports of 1878, although together the actual value exported is a little more than 2,600,000 rubles short of that year. This is owing to the enormous prices paid, and which, as above stated, were unprecedentedly high. From the lower ports of the Azoff the falling off in the amount of value of exports is very considerable, being nearly nine millions of rubles.

With respect to shipping, there has been, as a natural consequence of a bad harvest, a considerable falling off in the amount of tonnage as against 1878. The rates of freight, having no similar causes for sudden changes as in 1878, did not fluctuate to the same extent, and on the whole kept pretty steady, varying only, much as usual, at certain periods, according to the demand. The lowest rate paid for the United Kingdom and Continent was £3 13s. per quarter of wheat, and the highest figure was £6 18s. per like quarter. For Marseilles and the Mediterranean the fluctuations were not even as great as for the United Kingdom, as will be perceived by the inclosed return. The cost of lighterage was more steady than in 1878, not having the same causes to influence it, but on the whole the profit to owners was greater, as it never fell below paying rates. During the year the lowest rate was 15 copecks and the highest 45 copecks per chetwert.

The rates of exchange, as will be seen by the annexed return, varied little between January and May 31, after which date the value of the ruble suddenly rose, and is now about 10 per cent. better than in May last.

It has been announced that from January 1, 1880, a tax of one-half of a copeck per pood will be levied on all exports, and the proceeds thereof will be applied to the paving of the town and keeping and improving the port. Such a course has long been requisite, as the cost of cartage in spring and autumn, owing to the deep mud, is enormous, and sometimes carters refuse to work at any price. The harbor and quay likewise require that money should be spent upon them. The water at what is known as the new pier, where formerly there were about 12 feet, has been gradually decreasing yearly, and a sand-bank has been forming a short distance off, so that small crafts, which might be able to take their full cargo on board at the pier, often fear to do so lest they should not be able to clear the bank.

There are also a couple of wrecks of lighters, which render the navigation to the harbor dangerous, but now that there will be funds, it is to be hoped that these obstacles will be removed, and that means will also be provided for fastening lighters to buoys, instead of, as is now the custom, letting each lighter drop its own anchor, which is the cause of many accidents to lighters and their cargoes.

GODFREY M. HOYLAND.

UNITED STATES CONSULAR AGENCY,  
*Taganrog, March 22, 1880.*

## 1.—Exports from Odessa during 1879.

Articles.	Quantity.	Value.
		<i>Rubles.</i>
Wheat.....chetverts..	3,914,865	29,148,660
Rye.....do.....	782,631	4,685,786
Pease.....do.....	20,580	164,882
Maize.....do.....	955,370	3,821,462
Oats.....do.....	150,262	450,737
Millet.....do.....	43,518	130,555
Barley.....do.....	799,972	3,199,890
Linseed.....do.....	164,210	1,642,160
Rapeseed.....do.....	204,234	1,633,876
Flour.....poods..	143,561	2,010,274
Wax.....do.....	189	3,790
Cattle.....head..	20,145	604,350
Biscuits.....poods..	835	2,505
Ash planks.....number..	1,570	1,570
Old iron.....poods..	319,518	159,769
Church ornaments.....do.....	1,550	155,006
Caviare.....do.....	19,396	581,895
Wheels and felloes.....number..	4,623	9,246
Dry hides.....poods..	1,928	1,929
Ropes and twine.....do.....	42,219	84,438
Starch.....do.....	5	20
Books.....do.....	570	Not stated.
Oak staves.....number..	82,099	8,209
Butter.....poods..	45,580	396,640
Olive-oil.....do.....	2,783	16,686
Macaroni.....do.....	3,478	10,434
Soap.....do.....	3,628	10,885
Empty bags.....do.....	1,193	14,322
Garden fruits.....do.....	35,755	107,265
Sheep and goats.....number..	126,004	1,200,040
Cigarettes.....poods..	70	4,236
Molasses.....do.....	135,786	271,572
Hulled millet.....chetverts..	2,454	98,180
Beer.....poods..	5,184	5,185
Feathers.....do.....	1,653	49,560
Fishes.....do.....	26,045	104,189
Tallow.....do.....	31,490	137,450
Pork.....do.....	2,971	8,285
Malt spirits.....do.....	32,001,992	640,038
Pitch and tar.....do.....	2,726	5,452
Cheese.....do.....	19,054	95,273
Turpentine.....do.....	2,003	8,014
Tobacco.....do.....	22,417	112,087
Beans.....do.....	71,780	717,809
Tea.....do.....	280	11,204
Washed wool.....do.....	83,947	839,470
Unwashed wool.....do.....	102,503	615,021
Russia leather.....do.....	1,425	14,260
Raw silk.....do.....	3,204	480,699
Sugar:		
Raw.....do.....	6,281	31,406
Powdered, one-fifth.....do.....	79,950	319,896
Medium, seven-ninths.....do.....	3,039	9,119
Yellow, ten-elevenths.....do.....	4,229	8,458
Sundries.....do.....		766,881
Total merchandise.....		65,632,668
Total last year.....		85,815,013
Loss.....		20,162,925
Money:		
Gold.....		78,799
Silver.....		279,463
Paper.....		1,385,176
Total.....		1,738,437
Total last year.....		2,778,890
Money loss, 1879.....		1,040,462
Merchandise loss, 1879.....		20,162,925
Total loss, 1879.....		21,203,387

## 2.—Imports at Odessa in 1879.

Articles.	Quantity.	Value.
		<i>Rubles.</i>
Tea.....	poods 36,446	1,460,646
Coffee.....	do 83,739	1,591,066
Rice.....	do 181,400	725,962
Pepper and spice.....	do 35,196	899,222
Oil, lubricating.....	do 316,045	2,962,227
Wine:		
Casks.....	do 61,184	734,212
Bottles.....	number 72,772	221,743
Spirits:		
Casks.....	poods 1,023	61,880
Bottles.....	number 18,456	36,664
Fruits:		
Fresh.....	poods 512,265	1,570,120
Dried.....	do 390,872	1,759,847
Tobacco:		
Leaf.....	do 66,612	2,884,505
Cigars.....	do 188	60,376
Leather, manufactured.....	do 7,911	246,259
Hides, green.....	do 70,649	211,947
Gloves and leather goods.....	do 1,862	204,876
Cotton:		
Raw.....	do 643,431	5,147,452
Twist.....	do 22,042	901,711
Goods.....	do 6,049	400,710
Linen goods.....	do 2,350	76,433
Woolen goods.....	do 7,293	609,294
Silk goods.....	do 534	330,339
Linen, ad valorem duty.....	rubles 38,580	38,590
Clothing, ad valorem duty.....	do 215,899	215,900
Sacks, jute.....	poods 322,497	1,934,984
Gold manufactures.....	do 13	161,685
Silver.....	do 43	43,145
Watches:		
Gold.....	number 6,989	277,560
Silver.....	do 14,651	146,510
Clocks, wood.....	do 4,045	12,135
Watch-works.....	do 4,332	12,996
Raw iron.....	poods 1,396,189	2,783,611
Pipes, water and drain.....	number 3,950	3,950
Tin plates.....	poods 6,689	33,447
Iron, steel, and zinc manufactures.....	do 37,053	658,523
Ironware.....	do 4,333	88,673
Glassware.....	do 58,658	732,224
Smiths' work.....	do 68,810	344,050
Emery.....	do 41,757	169,318
Chinaware.....	do 51,223	518,766
Porcelain.....	do 1,560	31,517
Joiners' and turners' work.....	do 16,008	177,827
Chemicals.....	do 204,308	680,240
Medicines.....	do 1,105	44,225
Earthenware.....	do 2,185	22,058
Starch.....	do 42,812	171,248
Gutta-percha ware.....	do 891	48,267
Pasteboard.....	do 30,374	91,122
Writing-paper.....	do 2,806	42,101
Stationery.....	do 552	33,150
Cigarette-paper.....	do 4,898	146,940
Alabaster, plaster of Paris, and marble work.....	do 19,327	193,271
Ropes and twine.....	do 4,622	18,490
Incense.....	do 8,010	82,243
Rosin.....	do 59,079	78,110
Naphtha.....	do 337	1,350
Petroleum.....	do 33,020	82,566
Candles, torches, and wicks.....	do 11,126	111,265
Matches.....	number 18,435	221,231
Sealing-wax.....	poods 136	1,589
Pianos.....	number 870	100,000
Carriages.....	do 49	15,220
Coals.....	poods 12,850,239	2,570,048
Fish:		
Salt and pickled.....	do 30,903	531,900
Herrings.....	do 32,247	48,372
Saffron, vanilla, and cardamom.....	do 3,034	84,622
Manna and pearl barley.....	do 6,349	19,049
Nuts and almonds.....	do 120,493	681,270
Cheese.....	do 9,585	172,539
Porter bottles.....	number 63,143	63,143
Wax.....	poods 6,962	97,480
Cod-liver oil.....	do 20,854	83,418
Tar, pitch, and asphalt.....	do 220,339	176,271



## 2.—Imports at Odessa in 1879—Continued.

Articles.	Quantity.	Value.
		<i>Rubles.</i>
Plants, shrubs, &c.....	a. poods.....	39, 626 11, 888
Raw steel.....	do.....	24, 275 97, 108
Pig-iron.....	do.....	23, 730 58, 301
Tools.....	do.....	45, 068 456, 631
Engines and machines.....	do.....	171, 465 590, 415
Empty wine bottles.....	number.....	1, 407, 248 42, 217
Ink and blacking.....	poods.....	14, 861 89, 169
Paints and dyestuffs.....	do.....	11, 536 93, 999
Agricultural implements.....	do.....	117, 234 347, 568
Lime and cement.....	do.....	560, 158 339, 695
Bricks and tiles.....	do.....	329, 996 4, 383, 947
Sundries.....	do.....	
Total, 1879.....		44, 535, 150
Total, 1878.....		44, 478, 234
Gain in 1879.....		56, 916
<b>Moneys:</b>		
Russian gold.....		881, 612
Russian silver.....		61, 536
Foreign gold.....		598, 452
Foreign silver.....		126
Paper notes.....		10, 188, 835
Total, 1879.....		11, 725, 561
Total, 1878.....		11, 844, 626
Loss in 1879.....		119, 065
Duties collected in 1879.....		4, 989, 444
Duties collected in 1878.....		4, 510, 244
Gain in 1879.....		479, 200

## 3.—Navigation at Odessa during 1879.

Flag.	ENTERED.					
	Steam vessels.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
English.....	549	522, 510	4	2, 500	553	525, 010
Belgian.....	15	13, 000			15	13, 000
Austrian.....	87	67, 750	107	51, 250	194	119, 000
German.....	15	14, 300	3	1, 500	18	16, 000
Norwegian.....	16	16, 000	2	1, 000	18	17, 000
Italian.....	50	38, 100	119	47, 600	169	85, 700
Greek.....	1	700	97	27, 300	98	28, 000
French.....	44	74, 800			44	74, 800
Danish.....			1	950	1	950
Turkish.....			65	4, 000	65	4, 000
Russian.....	150	155, 000	8	3, 000	8	158, 000
Total, 1879.....	927	902, 360	406	139, 100	1, 333	1, 041, 460
Total, 1878.....	1, 254	1, 197, 767	485	109, 855	1, 739	1, 307, 622
Total, 1876.....	659	770, 897	528	168, 789	1, 187	939, 686

## 3.—Navigation at Odessa during 1879—Continued.

Flag.	CLEARED.					
	Steam vessels.		Sailing vessels.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
English.....	546	520, 118	5	26, 570	551	546, 686
Belgian.....	17	14, 380			17	14, 380
Austrian.....	91	72, 490	104	49, 760	195	123, 250
German.....	13	10, 872	6	2, 908	19	13, 780
Norwegian.....	16	16, 576	3	1, 670	19	18, 246
Italian.....	53	41, 679	117	46, 060	170	87, 739
Greek.....	2	1, 460	99	28, 964	101	28, 444
French.....	45	73, 096			45	73, 096
Danish.....						
Turkish.....			69	5, 686	69	5, 686
Russian.....	147	145, 978	12	5, 964	159	151, 972
Total, 1879.....	930	896, 649	415	165, 632	1, 345	1, 062, 281
Total, 1878.....	1, 262	1, 157, 182	468	126, 929	1, 730	1, 284, 111
Total, 1876.....	638	719, 008	520	170, 800	1, 158	889, 808

## 4.—Exports from Azof ports, 1879.

Articles.	Taganrog and Rostoff.	Mariopol.	Berdiansk.	Yisek.	Yanischisk.
Wheat.....chetverts.	2, 139, 894	207, 613	838, 129	113, 325	82, 621
Rye.....do....	352, 521	6, 100	32, 000	8, 000	1, 000
Barley.....do....	298, 795	66, 200	39, 343	40, 980	10, 470
Maise.....do....	66, 075				
Oats.....do....	60, 077	300			
Linseed.....do....	776, 150	35, 868	8, 106	101, 650	258
Rape seed.....do....	87, 284	19, 161	26, 348	6, 280	311
Tallow.....poods.	98, 391				
Butter.....do....	60, 294				
Wool, washed.....do....	186, 055		315	42, 550	
Flour.....do....	26, 300				
Anise seed.....do....	250				
Black caviare.....do....	6, 595				
Red caviare.....do....	154, 839				
Hides.....do....	1, 812		50		
Boxwood.....do....	182, 971				
Anthracite coal.....do....	19, 500				
Salted fish.....do....	12, 886				
Macaroni.....do....	1, 085				
Nutwood.....do....	815				
Sundries.....rubles.	18, 700	33, 000	600		
Total values.....do....	61, 443, 777	4, 556, 671	14, 332, 705	4, 186, 910	1, 224, 595
Total values, 1878.....do....	64, 105, 854	5, 542, 940	20, 471, 800	5, 915, 000	Not reported
Loss in 1879.....do....	2, 662, 077	986, 269	6, 139, 095	1, 728, 090	

## 5.—Imports at the Azof ports in 1879.

## TAGANROG AND ROSTOFF.

Articles.	Quantity.	Articles.	Quantity.
Raisins of Corinth .....	poods. 26, 379	Pitch and tar .....	poods. 1, 023
Cement .....	do. 20, 520	Bricks .....	do. 17, 170
Yellow wax .....	do. 554	Cloves and cinnamon .....	do. 106
Rice .....	do. 550	Mineral waters .....	do. 1, 197
Dried fruits .....	do. 136, 436	Bar iron .....	do. 8, 123
Oranges and lemons .....	do. 247, 662	Iron plates .....	do. 5, 173
Olives .....	do. 51, 333	Tin .....	do. 557
Walnuts and hazelnuts .....	do. 189, 436	Steel .....	do. 819
Almonds .....	do. 2, 310	Rails .....	do. 555, 749
Cheese .....	do. 459	Brass .....	do. 239
Coffee .....	do. 3, 509	Paints .....	do. 5, 800
Pepper .....	do. 1, 316	Glass .....	do. 1, 639
Tea .....	do. 1, 335	Empty bottles .....	number 24, 203
Rum and cognac .....	do. 268	Looking-glasses .....	poods. 2, 309
Rum, in bottles .....	number 1, 382	Steel, worked .....	do. 12, 369
Wine:		Iron, worked .....	do. 5, 490
In cases .....	poods. 103, 958	Iron wire .....	do. 2, 776
In bottles .....	number 2, 684	Tools .....	do. 1, 431
Porter .....	poods. 22, 236	Locomotives .....	do. 8, 759
Locust beans .....	do. 400, 882	Machinery .....	do. 20, 231
Sugar .....	do. 446	Joiners work .....	do. 900
Tobacco-leaf .....	do. 8, 550	Dynamite .....	do. 1, 506
Moselle wine .....	do. 3, 817	Sundries .....	rubles 125, 000
Fine wood .....	do. 28, 308		
Iron, pig .....	do. 15, 301	Total value .....	do. 7, 803, 000
Incense .....	do. 467	Total value, 1878 .....	do. 5, 153, 800
Rosin .....	do. 6, 004	Gain, 1879 .....	do. 2, 649, 200
Petroleum .....	do. 3, 421		
Olive oil .....	do. 195, 019	Moneys:	
Cocoanut oil .....	do. 2, 733	Russian gold .....	rubles 50, 334
Jute bags .....	do. 7, 123	Foreign gold .....	do. 110, 381
Soap .....	do. 426		
Caustic soda .....	do. 6, 043	Total .....	do. 160, 715
Alum .....	do. 342	Total, 1878 .....	do. 794, 550
Emery .....	do. 857	Loss, 1879 .....	do. 633, 834
Crockery .....	do. 800		
Linen .....	do. 4, 645		

## BERDIANSK.

Cement .....	poods. 22, 300	Wine, in cases .....	poods. 190
Almonds .....	do. 2, 681	Petroleum .....	do. 6, 574
Coffee .....	do. 2, 855	Olive oil .....	do. 2, 194

Duties paid, 1879 .....	rubles. 1, 030, 322
Duties paid, 1878 .....	do. 1, 162, 997
Loss in 1879 .....	82, 675

## 6.—Movement of shipping in the sea of Azof during 1879.

Flag.	Taganrog.			Mariopol.		
	Vessels.	Lasts.	Crew.	Vessels.	Lasts.	Crew.
British .....	254	115, 587	4, 150	14	5, 966	287
Netherlands .....	3	2, 014	84			
Russian .....	31	1, 902	462	10	2, 521	120
Greek .....	440	61, 538	4, 806	11	1, 563	118
German .....	2	665	49	1	297	12
Austrian .....	29	5, 737	395	10	2, 064	105
Italian .....	99	18, 492	1, 502	30	6, 566	310
French .....				1	698	23
Swedish .....	4	1, 097	58			
Turkish .....	57	3, 342	630	1	14	5
Total, 1879 .....	919	210, 874	12, 043	78	19, 749	973
Total, 1878 .....	1, 215	252, 993				

6.—*Movement of shipping in the sea of Azoff during 1879—Continued.*

Flag.	Berdiansk.			Yenitschesk.		
	Vessels.	Lasts.	Crew.	Vessels.	Lasts.	Crew.
British.....	7	2,758	133			
Dutch.....						
Russian.....				2	391	22
Greek.....	61	8,992	702	4	701	40
German.....						
Austrian.....	9	1,775	103	9	1,925	98
Italian.....	183	38,032	212	9	2,033	99
French.....						
Swedish.....						
Turkish.....	17	424	124	1	20	5
Total 1879.....	277	51,981	1,274	25	5,070	264
Total 1878.....	464	131,582		127	37,685	
Total ships at Azoff ports in 1879.....	1,299		Total tons in 1879.....			287,174
Total tons at Azoff ports in 1878.....	1,806		Total tons in 1878.....			575,337
Loss in 1879.....	507		Loss in 1879.....			288,163

7.—Exports from Nicolaief, 1879.

Articles.	Quantity.	Value.
		<i>Rubles.</i>
Wheat.....chetwerts.....	1,545,541	22,964,960
Rye.....do.....	1,098,870	6,111,390
Barley.....do.....	432,144	2,404,430
Linseed.....do.....	114,773	1,642,330
Rapeseed.....do.....	86,443	705,980
Oil.....do.....	32,232	154,070
Millet-seed.....do.....	1,120	6,320
Mustard.....do.....	1,120	25,000
Timber.....pieces.....	34,984	10,660
Sheep.....number.....	800	4,000
Potatoes.....cwt.....	400	400
Total 1879.....		34,029,480
Total 1878.....		19,979,726
Gain.....		14,049,754

8.—Imports at Nicolaief, 1879.

Articles.	Quantity.	Value.
		<i>Rubles.</i>
Coals .....	tons 17,000	} 651,110
Coffee .....	cwt. 2,100	
Cotton, manufactured .....	do 15	
Fruits .....	do 1,277	
Iron, manufactured .....	do 29,194	
Leather, manufactured .....	do 69	
Linen, manufactured .....	do 20	
Machinery .....	do 2,290	
Silk, manufactured .....	pounds 135	
Tea .....	do 1,314	
Wine .....	cwt. 600	
Cigars .....	pounds 75	
Sundries .....	cwt. 25	
Total 1879 .....		651,110
Total 1878 .....		311,904
Gain .....		339,170

## 9.—Navigation at Nicolaief in 1879.

Flag.	Steam.	Sail.	Total.
English .....	304	2	306
Belgian .....	9	—	9
German .....	5	1	6
Danish .....	4	—	4
Dutch .....	2	—	2
Norwegian .....	2	2	4
Greek .....	1	93	94
Italian .....	—	47	47
Austrian .....	—	27	27
Turkish .....	—	6	6
Russian .....	—	3	3
Total 1879 .....	327	181	508
Total 1878 .....	329	196	525
Loss, 1879 .....	2	15	17

NOTE.—The tonnage of arrivals is not reported. These vessels all cleared except 1 Greek and 1 Italian sailing ship. The tonnage may be estimated at about 346,000 tons against 353,396 in 1878.

## 10.—Comparative navigation South Russian ports, 1878 and 1879.

Ports.	Entered, 1879.		Entered, 1878.		Cleared, 1879.		Cleared, 1878.	
	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Odesa .....	1,333	1,041,460	1,739	1,307,622	1,345	1,062,281	1,730	1,284,111
Taganrog and Rostoff .....	919	210,374	1,215	406,120	—	—	—	—
Berdiansk .....	277	51,981	464	131,532	—	—	—	—
Nicolaief .....	327	352,000	525	353,396	—	—	—	—
Yesk .....	25	5,070	127	37,685	—	—	—	—
Mariopol .....	78	19,749	—	—	—	—	—	—
Total .....	2,939	1,680,634	4,070	2,238,355	1,345	1,062,281	1,730	1,284,111

## 11.—Totals of grain, cereals, and flour exported from South Russian ports, 1879.

[Stated in chetverts of six bushels.]

Ports.	Wheat.	Barley.	Rye.	Corn.	Oats.
Odesa .....	3,914,865	799,972	782,631	955,370	150,262
Taganrog and Rostoff .....	2,139,824	298,795	352,521	66,075	—
Berdiansk .....	838,129	39,342	32,000	—	—
Yesk .....	113,325	40,980	8,000	—	—
Mariopol .....	82,621	10,470	1,000	—	—
Nicolaief .....	1,545,541	432,144	1,098,870	—	92,290
Total 1879 .....	8,634,305	1,621,703	2,275,022	1,021,445	242,561
Total 1878 .....	10,925,323	3,006,266	3,331,838	742,657	743,070
Loss 1879 .....	2,291,018	1,384,563	1,056,816	—	500,509
Grain 1879 .....	—	—	—	278,788	—

## 11.—Totals of grain, cereals, and flour, &amp;c.—Continued.

Ports.	Millet.	Beans and pease.	Flour.	Linseed.	Rape.	Totals.
Odessa.....	43,518	20,580	<i>Poods.</i>	164,210	204,234	7,035,642
Taganrog and Rostoff.....			26,300	778,150	87,284	3,780,726
Berdiansk.....			143,591	8,106	26,348	943,925
Yessk.....				101,050	6,280	269,635
Mariopol.....				258	6,311	94,690
Nicolaief.....				114,773	86,443	3,309,993
Total 1879.....	43,518	20,580	169,891	1,164,547	410,900	15,434,581
Total 1878.....	28,313	335,754	235,617	1,270,136	498,754	20,882,111
Loss.....		315,174	65,726	105,589	87,854	5,447,530
Gain.....	15,205					963,803

## 12.—Comparative statement of values of exports and imports from South Russian ports.

Ports.	Exports.		Imports.	
	1878.	1879.	1878.	1879.
Odessa.....	<i>Rubles.</i> 85,815,013	<i>Rubles.</i> 65,652,088	<i>Rubles.</i> 44,478,234	<i>Rubles.</i> 44,535,150
Taganrog and Rostoff.....	64,105,854	61,443,777	} 5,153,800	} 7,803,000
Berdiansk.....	20,471,800	14,332,705		
Yessk.....	5,915,000	4,186,910		
Mariopol.....	5,542,940	4,556,671		
Nicolaief.....	19,979,726	34,029,480	311,940	651,110
Total.....	201,830,333	184,201,631	49,943,974	52,989,260
Loss 1879.....	17,628,702			
Gain 1879.....				3,045,286

## POLAND.

*Report, by Consul Rawicz, of Warsaw, on the trade and commerce of the Kingdom of Poland.\**

In accordance with Article 24 of Consular Regulations, I have the honor to transmit my annual report on the commerce and industries of the Kingdom of Poland for the year ending December 31, 1878. I regret to state that there is no possibility of procuring correct statistics for the period required in paragraph 381, owing to the fact that all official statements and customs returns are made up to the 31st of December of each year; besides that, there is, in many cases, an absolute impossibility of strictly complying with the instructions; but as my first report received the approval of the Department, I have adopted the same system now, and hope it will prove equally satisfactory.

\* *Table of equivalents for the various weights and measures used in this report.*

- 1 Polish korzec equal to 3.5 English bushels.
- 1 Russian chetwert equal to 5.77 English bushels.
- 1 last of grain equal to 11½ English quarters.
- 1 Russian pood equal to 36.4 English pounds.
- 1 vlocka equal to 41.48 English acres.
- 1 vedro equal to 2.70 English gallons.
- 1 Polish garniec equal to 0.88 English gallon.
- 1 klafter equal to 216 English cubic feet.
- 1 arshin equal to 28 English inches.

## NAVIGATION.

The depth of water in the Vistula for each month of the year 1877 was as follows :

Months.	Depth of water.			
	Greatest.		Lowest.	
	<i>Ft.</i>	<i>In.</i>	<i>Ft.</i>	<i>In.</i>
January.....	8	1	1	0
February.....	6	11	1	1
March.....	16	6	3	0
April.....	8	4	4	4
May.....	14	6	4	4
June.....	8	0	1	10
July.....	7	3	2	1
August.....	6	0	2	7
September.....	2	6	1	6
October.....	2	3	1	2
November.....	2	5	1	0
December.....	2	0	0	6

The greatest depth recorded was 16 feet 6 inches on the 25th of March ; the lowest, 6 inches, on the 22d of December.

*Freight.*—The average charges of freight for corn or other goods on the Vistula in sailing-boats in the year 1877, per 1 last of grain, or 51 cwt. of other goods, were as follows :

	Rubles
From Lawichost to Danzig.....	20 to 25
From Pulawy to Danzig.....	18 to 20
From Twangorod to Danzig.....	18 to 20
From Warsaw to Danzig.....	8 to 12
From Plock to Danzig.....	6 to 9
From Wloclawek to Danzig.....	5 to 7½
From Nieszawa to Danzig.....	5 to 6

The charges of freight for corn in gabars towed by steamboats were in the ratio of from 4 to 5 rubles higher.

*Insurance.*—The insurance charged on grain or other goods, either on gabars or sailing-boats, was as follows :

	Per cent.
From Lawichost to Danzig.....	1½
From Pulawy to Danzig.....	1½
From Twangorod to Danzig.....	1½
From Warsaw to Danzig.....	1
From Plock to Danzig.....	½
From Wloclawek to Danzig.....	¼
From Nieszawa to Danzig.....	¼

The total value of goods imported and exported by the Vistula in 1877 amounted to 10,995,981 rubles, showing a decrease from the previous year of 1,050,624 rubles.

The value of goods exported by the Vistula in the same year amounted to 8,606,037 rubles, of which the following are the principal articles :

	Rubles.
Wood and timber.....	4,743,870
Wheat.....	2,455,190
Rye.....	831,306
Oil-seeds.....	228,822
Mead and honey.....	117,385
Flour.....	62,560
Wool.....	52,500
Bran.....	41,025
Stones.....	29,220

	Rubles.
Pitch and tar .....	13, 115
Bones .....	12, 325
Pease .....	5, 520
Oil-cakes .....	2, 925
Seed .....	2, 572
Oats .....	2, 500
Barley .....	2, 388
Miscellaneous .....	2, 824
<b>Total .....</b>	<b>8, 606, 037</b>

The value of goods imported by the Vistula during the same period is estimated at 2,385,807 rubles, of which the principal articles were the following :

## IMPORTS.

	Rubles.
Hardware .....	822, 344
Chemicals .....	315, 326
Metals, raw .....	257, 139
Cement .....	134, 860
Rice .....	117, 200
Dyes .....	109, 676
Coal and coke .....	68, 155
Salt .....	62, 402
Resin .....	56, 260
Paraffine .....	52, 640
Stationery .....	51, 460
Fruits, fresh and dry .....	38, 980
Wine, rum, and porter .....	37, 981
Hides .....	21, 200
Brimstone .....	19, 280
Oil .....	17, 450
Emery .....	16, 372
Machinery .....	14, 160
Stones .....	13, 955
Groceries .....	12, 688
Oak-bark .....	11, 485
Petroleum .....	11, 200
Asphalt .....	10, 370
Pitch .....	6, 670
Flax and hemp .....	5, 200
Castings .....	3, 390
Clay .....	2, 973
Glass .....	2, 771
Wheat .....	2, 624
Miscellaneous .....	89, 596
<b>Total .....</b>	<b>2, 385, 807</b>

## AGRICULTURE.

As one of the most important grain-producing countries, Poland usually has a surplus of cereals, and realizes considerable sums from their export.

The harvest in 1877, generally taken, may be said to have been good, particularly as regards wheat, though rye has not yielded abundantly. The yield of spring-sown grain, and chiefly barley, was in many localities below the average, whereas the crop of hay and clover was abundant, and had it not been for the heavy rains during the harvest season, the crops would have been abundant. The yield of potatoes and beet-root was above the average, though the early frosts in the beginning of October caused great damages to many of the farmers. The land-owners, and particularly of the wealthier class, have profited well, on account of the high prices of grain abroad, and the immeasurable low price of the ruble, which profits would have been still greater had not the ports of



the Black Sea been blocked up for the grain raised in Russia, which caused immense quantities of that produce to be sent by railways to the northern and western countries, creating an unusual competition to Polish grain.

Out of the total area of the Kingdom of Poland, containing about 23,102,940 Polish morgs, deducting 1,434,998 morgs of government property distributed after the last insurrection among generals and higher officials, and 2,194,772 morgs of waste land, bogs, downs, roads, &c., there remains about 19,473,170 morgs of useful ground, consisting of larger and middle properties, which may be subdivided as follows:

	Larger property.	Smaller property.	Total.
	<i>Morgs.</i>	<i>Morgs.</i>	<i>Morgs.</i>
First class, under wheat .....	1,217,846	930,727	2,148,573
Second class, under rye .....	5,510,157	4,239,283	9,749,440
Gardens .....	288,092	220,172	508,264
Meadows .....	1,246,861	924,825	2,171,686
Pastures .....	654,805	500,342	1,155,147
Forests, private .....	2,119,909	1,020,151	2,740,060
Total .....	11,037,670	8,435,500	19,473,170

These figures approximately represent the agricultural state of the Kingdom of Poland, and at the same time show the advantageous ratio of meadows and pasture grounds to that of arable land. From this approximative statement, for the correctness of which, in the absence of statistical offices in this country, I cannot guarantee, it will be seen that the greater properties constitute the preponderating portion of the agricultural produce of the kingdom.

The greatest drawbacks retarding the development of husbandry of the greater properties in this country are the servitudes or rights bestowed on the lesser proprietors, after the enfranchisement of the serfs, of profiting of the pasture grounds and forests of the greater estates, a right which, although it enables the possessor of the encumbered property to disengage himself of that burden, is nevertheless cooped in such a form as renders it extremely difficult to get free of them, so that since 1863, *i. e.*, from the enactment of that right, but few of the greater properties have availed themselves of it.

Notwithstanding the above inconveniences and the want of statistical offices and data on the part of the government, the agricultural state of the Kingdom of Poland is undoubtedly progressing, for notwithstanding the many unfavorable circumstances principally caused by the last enactment, there is a steady amelioration introduced every year in the whole agricultural system, although generally speaking much remains yet to be done.

*Wool fair.*—The unfavorable state of wool business, which continued since the closing of the last year's fair and lasted nearly to the opening of this year's wool fair, which as usual was opened on the 15th of June, and lasted eight days, may chiefly be attributed to the general stagnation caused by the uncertain political state of Europe. Such a state naturally exhausted all the ready-made goods that the manufacturers had in store, and consequently the greater demand for wool at the London auction in May did not fail to give an impulse to the trade on the Continent.

The so long neglected transactions commenced in about one month preceding the fair, all over the country, with a considerable number of purchases for abroad.

The disposition under which this fair was opened, although somewhat low prices ruled, was pretty favorable.

The constant falling off of the ruble had likewise a considerable influence on this fair, as to this circumstance the strong desire of purchasers for foreign manufacturers may principally be attributed.

The amount of wool produced at this fair nearly equaled that of last year, but surpassed it much in washing. In this respect there was visible progress, which was probably aided by the favorable season. Although foreign merchants were pretty numerous represented, the greater quantity was speedily bought by local manufacturers, so that only one-sixth of the whole produce remained unsold.

The prices were from 2 to 5 thalers higher than those of last year. During the last two days the prices were several thalers lower, owing to the unfavorable news from the fair at Berlin.

The total amount of wool produced at this fair is returned at 46,000 poods; remained in store, 9,000 poods; total, 55,000 poods; showing an increase over the preceding year of 2,500 poods.

The average prices of the various qualities of wool were as follows:

	Thalers.
First quality, prime .....	112 to 117
Second quality, thin .....	85 to 94
Third quality, middling thin .....	70 to 87
Fourth quality, middling thin .....	60 to 66
Fifth quality, middling thin .....	56 to 60

These prices were per cwt. of 132 Russian pounds, equal to 119.24 pounds English. The thaler is equal to 90 copecks.

After the closing of the fair transactions were still carried on by more favorable prices.

#### BANKING.

The annual report published by the Bank of Poland for the year ending 12th January, 1878—31st December, 1877, gives the following statement:

Dr.		Rubles.
Ready cash .....	8,927,367.21	
Debentures, property of the bank .....	4,512,470.95	
Purchase of local and foreign bills .....	10,740,624.65	
Various loans .....	1,785,782.30	
Accounts current .....	5,568,108.96	
Loans to various institutions .....	1,173,633.03	
Capital on mortgages .....	9,879,400.88	
Loans to branch banks .....	168,964.12	
Buildings and other property of the bank .....	334,867.00	
Total .....	43,621,229.10	
Cr.		
Funds towards payment of national debt .....	1,078,662.02	
Capitals belonging to various institutions .....	2,638,131.05	
Various deposits .....	17,913,818.53	
Capitals on interests .....	5,009,640.33	
Sums for remittance .....	7,071,815.98	
Fund in reserve .....	500,000.00	
Primitive capital of the bank .....	8,000,000.00	
Total .....	42,212,067.91	

Leaving a balance in favor of the bank of 879,161 rubles 19 copecks, and showing a decrease in the profits from the preceding year of 54,417 rubles.

*Commercial Bank.*—The report of this bank for the year ended December 31, 1877, returns as follows:

	Rubles.
Total operation at Warsaw .....	314, 643, 277. 46
Total operation at St. Petersburg .....	466, 411, 626. 31
Total .....	781, 054, 903. 77

Showing a decrease from the preceding year of 121,369,814 rubles. Leaving a balance in favor of this bank of 685,905 rubles 26 copecks; showing an increase over the previous year of 89,000 rubles, and giving the shareholders a dividend of 9 per cent., 1 per cent. more than last year.

*Discount Bank.*—This bank publishes the following statement:

Total transactions, 176,850,729 rubles; showing a decrease from the previous year of 26,286,099 rubles, leaving a net profit of 180,000 rubles, allowing the shareholders a dividend of 9 per cent., the same as last year.

The unfavorable circumstances depressing the trade and commerce of nearly the whole of Europe, caused by the Eastern war, the general uncertainty, the rapid falling down of the Russian value, the fluctuation of exchange of all local and foreign public stocks, put a stop to all industrial and commercial development, making the manufacturers and merchants extremely cautious in all their transactions.

In such a grave economical state, the capitalists, finding no room in commerce and trade, soon filled the banks with ready cash, whereas the discount of bills became rarer and rarer, and all operations, which finally caused a lowering rate of the interest.

Notwithstanding all that, the results of the various banking institutions may generally be considered as having been pretty good.

*Bank of Mutual Credit.*—The total operation of this bank in the year 1877 amounted to 42,274,546 rubles, showing a decrease from the preceding year of 4,308,608 rubles, leaving a net profit in its favor of 82,791 rubles, and showing a decrease from last year of 11,106 rubles, giving the shareholders a dividend, just the same as last year, of 8 per cent.

*The Landed Bank (Credit Foncier)* publishes the following statement for the period from May 13, 1877, to May 13, 1878:

Dr.	Rubles.
Sums on mortgage .....	75, 255, 635. 62½
Various arrears on properties, pine, &c. ....	587, 700. 42½
In public securities .....	3, 307, 734. 25½
Value of buildings and other property of the bank .....	726, 291. 57
In cash .....	23, 880, 701. 80
Various loans .....	380, 423. 16
Total .....	104, 138, 486. 92½

Cr.	
Debentures in circulation .....	75, 255, 635. 62½
Arrears to be paid .....	975, 103. 15½
Various deposits .....	23, 265, 371. 64
Total .....	99, 496, 110. 42

Leaving a balance in favor of this bank of 4,642,376 rubles and 50½ copecks, and showing a surplus over the preceding year of 243,778 rubles.

The total number of estates mortgaged amounts to 7,393, and the num-

ber of landed properties exposed for sale during the above-mentioned period to 3,898, of which, however, only 52 were sold. The exchange of these debentures during the period above stated was as follows:

Dates.	100 rubles debentures.		
	Third emission, first series.	Third emission, second series.	First series of 1880.
Highest, April 4, 1878	Rubles. 101.00	Rubles. 100.30	Rubles. .....
Highest, January 2, 1878	.....	.....	.....
Lowest, June 1, 1877	96.75	.....	.....
Lowest, June 1, 1877	.....	96.75	.....
Average for the year	98.93	98.20	.....
Highest, May 3, 1878	.....	.....	99.85
Lowest, May 19, 1877	.....	.....	92.15
Average for the year	.....	.....	96.62

## RAILROADS.

*Warsaw-Vienna Line.*—The following statements have been published for the year 1877:

	Rubles.
Trains for imperial family	1,388.25
Passengers, 1,526,719	1,237,215.20
Military with baggage	62,444.50½
Passengers' luggage, 341,165 poods	66,973.68
Carriages, 502	4,389.03
Dogs, 2,452 head	1,208.98½
Animals, 130,890 head	40,716.22
Goods, 88,015,349 poods	3,242,523.06½
Miscellaneous	677,353.91
Total	5,334,212.84½
Expenditure	2,569,561.24
Balance	2,764,651.60½
Rent to government sinking fund, &c.	1,505,858.95½
Net profit for the year	1,258,792.65

Showing an increase in the income over the year 1876 of 553,862 rubles, or 11.58 per cent.

The transport of coals, being one of the principal articles on this line, amounted to 35,762,361 poods, showing an increase over the year 1876 of 1,457,317 poods. There has been a marked increase in the transport of corn on all the railways in the kingdom, owing to the closing of the Black and Azoff sea-ports, causing likewise a considerable increase in the transport of this article on this line, which amounted to 11,625,416 poods. It must also be stated that as this company is obliged to pay in gold the interest, sinking fund, &c., as well as for rails, machinery, and other articles imported from abroad, they have suffered during the above-mentioned period a loss of above 512,444 rubles 50½ copecks on account of the low value of the ruble.

*Warsaw-Bromberg Line.*

	Rubles.
Trains for imperial family .....	225. 75
Passengers, 351,418 .....	259,920. 47½
Military with baggage .....	5,419. 01
Luggage, 127,608 poods .....	17,821. 02
Carriages, 259 .....	1,311. 43
Dogs, 802 head .....	332. 34
Animals, 120,579 head .....	33,214. 89
Goods, 22,442,274 poods .....	570,339. 76½
Miscellaneous .....	297,512. 57½
<b>Total</b> .....	<b>1,186,097. 25½</b>
<b>Expenditure</b> .....	<b>885,695. 58½</b>
<b>Balance</b> .....	<b>300,401. 67</b>
As the interest guaranteed by the government amounts to .....	279,045. 00
<b>Net profit</b> .....	<b>21 356. 67</b>

This amount is retained as a reserve fund, showing an increase in the income over the previous year of 157,928 rubles, or 15.36 per cent., and in the transport of goods an increase of 939,477 poods.

The principal articles of transport on this line were, in poods: Coals, 5,447,421; corn, 5,470,241; salt, 1,386,209; beet-root, 1,324,624; sugar, 701,377; seeds, 454,784; raw and wrought iron, 979,764; molasses, 414,046, &c.

*Warsaw-Terespol Line.*

	Rubles.
Passengers, 432,443 .....	553,610. 37
Military with baggage .....	152,085. 66½
Luggage, 7,933,196 poods .....	31,732. 24
Carriages, 930 .....	11,482. 52
Animals, 170,985 head; dogs, 1,242 head; fowls, 10,062 poods .....	241,548. 06½
Goods, 21,761,980 poods .....	1,294,531. 98½
Miscellaneous .....	191,967. 01½
<b>Total</b> .....	<b>2,476,957. 88</b>
<b>Expenditure</b> .....	<b>1,401,671. 31</b>
<b>Balance</b> .....	<b>1,075,286. 57</b>
Interest guaranteed by the government sinking fund, &c .....	842,662. 87½
<b>Therefore the government receives for adding to the interest of former years</b> .....	<b>232,623. 75½</b>

Showing a net increase in the income over the previous year of 105,968 rubles 48 copecks, and an increase of transport of goods of 7,231,389 poods.

The development of commercial intercourse since the opening of the railway communication with the interior of Russia is yearly making a steady progress, particularly the last year, chiefly caused by the custom-house duties being now paid in gold, and the excessive high rate of exchange which inspired the Russian merchants to make considerable orders in the various articles of goods manufactured here.

One of these lines is the Warsaw-Terespol Railway, which, joining at Brzesc with one of the principal knots of the Russian railways, transports yearly in both directions considerable quantities of home produce.

The amount of principal articles transported on this line during the years 1876 and 1877 were as follows:

Articles.	1876.	1877.
	<i>Poods.</i>	<i>Poods.</i>
Corn .....	5,117,628	10,357,742
Wrought iron .....	403,932	486,778
Machinery and agricultural implements .....	352,340	177,994
Hardware .....	323,625	506,534
Sugar .....	173,272	176,317
Cotton stuffs .....	130,546	155,125
Linen .....	95,919	150,174
Furniture .....	67,889	74,531
Hides .....	56,556	76,785
Sheet-iron .....	49,159	46,404
Farina .....	48,788	121,080
Fruit .....	47,110	79,676
Leather .....	44,373	71,953
Cloth and woolen stuffs .....	44,163	71,846
Glass and porcelain .....	35,217	44,095
Various metallic articles .....	12,700	34,274
Twist, hemp .....	12,501	44,001
Twist, flax .....	329	35,999

It must, however, be observed that the goods coming from Russia to Poland are in a raw state, whereas those going to Russia are all ready-made articles.

*Lodz Line.*

	<i>Rubles.</i>
Passengers, 182,186 .....	55,759.59
Military, 10,417 with baggage .....	1,239.83
Luggage, 57,116 poods .....	2,618.85½
Animals, 97,374 head .....	2,664.51½
Carriages, 64 .....	191.68
Goods, 11,773,051 poods .....	142,583.86
Miscellaneous .....	12,652.59
<b>Total .....</b>	<b>217,710.92</b>
<b>Expenditure .....</b>	<b>170,218.86</b>
<b>Balance .....</b>	<b>47,492.06</b>

Showing an increase in the income over the previous years of 15,129 rubles or 46.7 per cent.

The principal articles of goods transported on this line were, in poods: Coals, 6,968,659; wood and timber, 899,685; various stuffs, 500,173; lime, 331,675; cotton, raw and spun, 535,318; drugs and dyes, 149,433; beet-root, 138,882; brick and roof tiles, 135,298; machinery, 128,877; rye, 118,790; salt, 113,772.

To render this report more complete, I beg to inclose the following appendices:

- No. 1.—Showing the external trade and commerce for 1876.
- No. 2.—Showing the imports for 1876.
- No. 3.—Showing the exports for 1876.
- No. 4.—Showing the industries for 1877.
- No. 5.—Showing the agricultural produce sown in 1877.
- No. 6.—Showing the agricultural produce reaped in 1877.
- No. 7.—Showing the population for 1877.
- No. 8.—Showing the cattle-disease.
- No. 9.—Showing the produce of sugar for 1877.
- No. 10.—Showing the number of schools and scholars for 1877.
- No. 11.—Showing the average prices of food, &c., for 1877.
- No. 12.—Showing the number of factories insured.

JOSEPH RAWICZ.

UNITED STATES CONSULATE,  
Warsaw.

1.—*External commerce of the Kingdom of Poland, via the Polish custom-houses, for the year 1876.*

Articles.	Imports.	Exports.
	<i>Rubles.</i>	<i>Rubles.</i>
Goods .....	101,003,047	86,318,963
Gold coin, foreign .....	106,657	19,510,444
Gold coin, Russian .....	31,804	98,045
Silver coin, foreign .....	64,990	883,757
Silver coin, Russian .....		32,242
Gold bullion .....	162,600	2,448,354
Silver bullion .....	2,861,400	
<b>Total</b> .....	<b>104,230,498</b>	<b>109,291,805</b>

Making a total of 213,522,303 rubles, and showing a decrease from the previous year of 6,425,124 rubles.

By excluding the custom-house of Wierzbolowo, as representing nearly the exclusive transit to Russia (though a considerable part of the goods remain in this country), the following will be the external trade of Poland:

Articles.	Imports.	Exports.
	<i>Rubles.</i>	<i>Rubles.</i>
Goods .....	72,613,205	53,534,331
Gold coin, foreign .....	61,724	78,970
Silver coin, foreign .....	64,990	98,757
Silver coin, Russian .....		32,242
Silver bullion .....	160,200	
<b>Total</b> .....	<b>72,900,119</b>	<b>53,739,300</b>

Making a total of 126,639,419 rubles, showing a decrease from the previous year of 1,338,051 rubles, namely, in the imports 3,731,610 rubles, and an increase in the exports of 2,393,559 rubles. The duty on goods imported via the Polish custom-houses during the same year, excluding Wierzbolowo, amounts to 11,115,570 rubles, being an increase of 1,196,502 rubles over the year 1875.

2.—*Imports of Poland for 1876.*

Articles.	Via Wierzbolowo.	Not including Wierzbolowo.
	<i>Rubles.</i>	<i>Rubles.</i>
Steel and rails .....	673,523	5,567,944
Steel and iron articles .....	654,157	5,468,922
Cotton, spun .....	498,146	4,192,401
Cotton, raw .....	1,060,840	4,151,162
Salt .....	422,425	3,949,644
Wool .....	472,525	3,809,481
Tea .....	2,381,729	2,916,854
Machinery .....	3,881,927	2,616,158
Woolen articles .....	2,243,849	2,356,113
Wrought iron .....	982,883	2,453,619
Coals .....	111,514	2,275,023
Silk, raw .....	419,472	2,094,947
Napthta .....	541,185	2,094,862
Wine .....	84,357	1,864,706
Flax and hemp articles .....	598,745	1,457,598
Fruits, fresh .....	74,886	1,426,694
Cotton articles .....	427,077	1,419,227
Dyes and colors .....	322,405	1,318,020
Herrings .....	628,573	1,180,728
Spinning-machines .....	745,070	1,137,847
Chemicals, various .....	245,164	1,181,026
Groceries .....	407,348	1,004,511

## 2.—Imports of Poland for 1876—Continued.

Articles.	Via Wierzbolowo.	Not including Wierzbolowo.
	<i>Rubles.</i>	<i>Rubles.</i>
Silk articles .....	822,110	792,921
Oil .....	118,871	610,001
Joiners' articles .....	41,503	592,220
Yeast .....	1,375	557,194
Furs .....	808,752	546,565
Pig-iron .....	101,183	510,783
Plants, various .....	437,811	477,824
Hides .....	26,495	473,759
Clothes .....	359,973	472,793
Articles of food .....	23,826	454,134
Tobacco .....	184,705	433,463
Glass .....	90,680	375,107
Rice .....	87,242	356,336
Stationery .....	95,237	354,837
Pig-iron articles .....	51,651	352,843
Clocks and watches .....	1,323,865	327,330
Leather .....	276,272	326,072
Books and maps .....	1,860,957	317,966
Musical instruments .....	110,740	317,262
Flax and hemp, spun .....	31,860	315,720
Pictures and engravings .....	14,715	314,686
Gum and gutta-percha .....	96,628	257,538
Agricultural implements .....	590,337	248,013
Potters' clay .....	8,131	226,384
Copper .....	16,948	191,791
Lead .....	72,494	191,290
Lime and cement .....	25,453	186,922
Hats and caps .....	255,394	179,294
Wagons, railway .....	518,800	176,800
Fancy articles .....	209,555	167,258
Laces .....	90,621	162,908
Stones, different .....	5,802	155,791
Fruits, dried .....	2,962	151,368
Zinc .....	5,185	149,759
Papier-maché .....	95	134,235
Buttons .....	63,466	133,839
Sheet-iron .....	28,042	131,274
Wax .....	190,269	130,753
Porcelain, articles of .....	16,004	127,387
Hops .....	123,619	110,952
Rosin .....	10,607	108,194
Flour .....	5,647	102,643
Optician instruments .....	50,151	90,698
Copper articles .....	29,190	87,955
Clay apparatus for chemists .....		84,411
Starch .....	14,941	81,730
Flax and hemp twist .....		77,147
Rum .....	5,324	75,518
Plumes .....	8,543	75,450
Tallow .....	32	73,634
Paraffine .....	120	73,500
Corn .....	21,907	71,155
Mead and honey .....	14,842	71,085
Toys .....	23,157	70,916
Leather articles .....	43,331	69,210
Emery .....	1,793	63,652
Stearine .....	200	58,737
Asphalt .....	423	56,940
Matches .....	308	55,613
Beverages, gas .....	5,468	55,106
Cheese .....	15,158	54,616
Flowers, artificial .....	83,800	51,143
Ingredients for tanners .....	1,041	49,993
Wood .....	64	49,228
Drawing instruments .....	30,739	48,869
Stay of a weaver's loom .....	35,226	46,681
Straw, articles of .....	22,840	45,215
Glass beads .....	3,125	44,963
Tin .....	6,734	43,903
Tar .....	69	43,046
Earthenware .....	1,642	42,629
Porter .....	641	40,724
Draining-pipes .....		40,449
Carpenters' articles .....	168,912	38,396
Perfumes .....	17,181	37,423
Sweetmeats .....	12,075	36,966
Brass articles .....	33,081	35,867
Colophony .....	19,174	34,599
Gypsum and marble .....	4,964	34,508
Cattle .....		34,161



## 2.—Imports of Poland for 1876—Continued.

Articles.	Via Wierzbolowo.	Not including Wierzbolowo.
	<i>Rubles.</i>	<i>Rubles.</i>
Gems, various	5,176	33,334
Hair	5,637	31,370
Ores, various	7,028	29,718
Raisins	3,044	23,118
Physical instruments	98,785	27,594
Ether	11,350	26,509
Mustard	18,161	24,128
Gold and silver articles	12,538	23,085
Glue	9,192	22,201
Wad	240	22,182
Brimstone	27,047	21,605
Brandy, various	2,341	18,140
Guano	3,401	17,527
Baskets	937	17,528
Mahogany	34,381	16,538
Grease for machines	133	16,491
Wicks for lamps	1,556	16,096
Tags		16,068
Candles and torches	12,055	15,797
Coral	1,435	15,780
Litharge	3,317	15,664
Umbrellas	43,835	15,430
Teasels	57	15,121
Fish grease		14,870
Suicars	2,393	14,763
Drugs	25,404	13,841
Carriages	2,284	13,793
Varnish	2,112	13,444
Potash	88	12,893
Weights	375	11,689
Beddings	1,657	11,599
Macaroni and sago	612	10,473
Fruit-julces	8,208	9,327
Soap	5,456	8,857
Laurel-leaves	4,579	8,660
Gingerbread	4,330	8,644
Onits	6,836	8,131
Feathers	90	7,890
Boats		7,730
Quicksilver	7,683	6,893
Vinegar	90	6,576
Truffle	1,618	6,566
Phosphorus	24,210	6,283
Sirup	2,793	6,331
Corkwood		5,985
Camphor	4,942	5,614
Cod liver oil		5,367
Bones	1,635	4,685
Soot	2,730	4,390
Bricks	302	4,101
Sponge	238	4,089
Oysters	33,177	4,026
Alabaster, articles of	114	3,905
Archeological articles	43,180	3,700
Types, printing	3,737	3,325
Anise, cumin, and mustard	1,088	3,259
Silk-worms		2,540
Whalebone	1,493	1,231
Sealing-wax	508	1,183
Models, various	3,842	600
Miscellaneous	185,793	924,183
Total	28,389,842	72,613,205

## 3.—Exports of Poland for 1876.

Articles.	Via Wierzbolowo.	Not including Wierzbolowo.
	<i>Rubles.</i>	<i>Rubles.</i>
Rye .....	7, 133, 850	8, 218, 760
Wheat .....	451, 350	7, 900, 075
Timber .....	488, 320	7, 496, 634
Flax, raw .....	7, 496, 454	4, 521, 327
Wool, raw .....	389, 259	4, 209, 048
Cattle .....	951, 280	2, 581, 531
Hemp, raw .....	2, 935, 512	1, 078, 175
Furs, various .....	1, 129, 571	919, 602
Mead and honey .....	54	640, 275
Oats .....	1, 993, 075	608, 212
Spirits .....	23, 884	509, 628
Poppy-seed .....	97, 710	465, 106
Caviare .....	50, 660	439, 322
Horses .....	1, 120, 950	414, 267
Hides .....	1, 029, 486	405, 848
Silk stuffs .....	5, 852	400, 300
Oil-cakes .....	18, 845	326, 865
Linseed .....	1, 133, 724	308, 911
Eggs .....		305, 871
Poultry .....	5, 639	253, 013
Bags .....	213, 569	251, 840
Sugar .....		237, 330
Bristles .....	772, 880	236, 193
Pease .....	65, 434	232, 092
Bones, burnt .....	315, 390	231, 895
Zinc .....		210, 214
Barley .....	178, 733	190, 213
Bran .....	11, 000	173, 099
Passengers' luggage .....	478, 510	151, 777
Vegetables, and seeds of .....	54, 000	151, 375
Turpentine .....	179, 016	147, 236
Flour, wheat, and rye .....	31, 320	146, 577
Feathers .....	113, 580	140, 191
Leathers .....	458, 009	122, 324
Books and notes .....	80, 163	120, 055
Hair, goats .....		111, 827
Fruits and seeds .....	4, 234	104, 970
Silk, raw .....	200, 790	89, 615
Tallow .....	55, 890	85, 145
Flax oakum .....	70, 272	78, 874
Joiners' articles .....	76, 755	68, 434
Buckwheat .....	18, 632	68, 200
Pitch .....	593	67, 434
Bones, raw .....	5, 050	65, 239
Butter .....	18, 012	59, 643
Lime and cement .....	503	53, 332
Woolen stuffs .....	524, 150	42, 930
Metal, articles of .....	402, 122	41, 004
Flax and hemp textiles .....	103, 369	38, 476
Dyes .....	769	34, 815
Stones .....	45	32, 780
Drugs .....	125, 960	32, 530
Cotton .....	6, 712	32, 171
Iron .....	200	28, 617
Hops .....	63, 120	27, 826
Mats .....	29, 408	22, 230
Machinery and models .....	80, 869	21, 003
Grits .....	1, 160	20, 000
Ore, iron .....		17, 340
Glue .....	56, 802	16, 587
Guano .....		15, 621
Charcoal .....		13, 684
Glass articles .....	7, 350	13, 613
Pictures and engravings .....	6, 332	12, 799
Earthenware .....		12, 610
Horns and hoofs .....	1, 296	12, 459
Cotton stuffs .....	4, 005	12, 381
Straw .....	13, 915	12, 290
Tobacco .....	62, 032	11, 539
Groceries .....	30, 480	10, 889
Bark .....		9, 295
Musical instruments .....	3, 900	8, 037
Gutta-percha articles .....	43, 740	7, 740
Refuses, wool .....		7, 420
Hemp-seed .....	33, 610	7, 114
Kitchen utensils .....	17, 693	6, 895
Beans .....		6, 752
Meat .....	71, 623	6, 565
Hay .....	1, 095	6, 350

## 3.—Exports of Poland for 1876—Continued.

Articles.	Via Wierzbolowo.	Not including Wierzbolowo.
	<i>Rubles.</i>	<i>Rubles.</i>
Objects of natural history .....		6,290
Mustard .....	1,480	6,170
Tar .....	3,896	6,100
Anise .....	5,260	5,369
Paper .....	1,286	5,242
Paper-shreddings .....	510	5,063
Mathematical instruments .....	16,100	4,860
Clothes and linen .....	29,587	4,406
Carriages .....	5,000	4,190
Bouillon .....		3,645
Horse-tails .....	335,328	3,500
Cumin .....	6,350	3,490
Peat .....		3,413
Ores, various .....		3,164
Brandy .....	2,634	2,685
Clay .....		2,665
Papier-maché .....		2,400
Downs .....	175,425	2,249
Slag .....		2,243
Miscellaneous .....	704,400	7,248,182
Total .....	32,784,632	53,534,331

## 4.—Industries of Poland for 1877.

## TOWN OF WARSAW.

Description.	Number of factories.	Value of produce.	Number of work-men.
		<i>Rubles.</i>	
Tobacco .....	10	3,895,130	3,979
Tanneries .....	23	3,169,702	923
Steam-engines .....	10	3,085,220	2,433
Distilleries of rum and brandy .....	16	2,308,830	102
Breweries .....	21	1,511,600	301
Metal works, various .....	15	1,292,407	858
Steam mills .....	4	1,245,360	211
Candles and soap .....	3	504,912	99
Plated articles .....	6	483,375	407
Gas works .....	1	385,000	233
Joiner works .....	8	348,340	507
Chemicals .....	2	276,440	122
Wire works .....	2	244,942	213
Carriages .....	13	186,900	254
Oil for machines .....	2	184,700	24
Cheese .....	13	159,100	65
Bakers .....	1	136,000	59
Pianos .....	3	108,000	93
Surgeons' articles .....	4	99,755	107
Looking-glasses .....	3	98,506	17
Millstones .....	3	88,400	37
Lamps .....	3	88,000	105
Sewing-machines .....	1	81,250	65
Chiocory .....	3	77,925	31
Woolen stuffs .....	5	77,028	77
Decimal weights .....	2	75,500	86
Paper-hangings .....	2	75,000	75
Perfumes .....	5	72,500	29
Mineral waters, artificial .....	8	70,381	71
Oil colors and varnishes .....	2	69,030	33
Carpenter works .....	4	67,000	67
Opticians' instruments .....	2	60,288	34
Buttons .....	3	55,706	74
Hydraulic works .....	1	54,850	48
Felt roofing .....	3	54,350	18
Chocolate .....	1	47,000	8
Starch .....	5	42,450	22
Tile, stove .....	5	35,500	51
Shoeblack and ink .....	2	34,710	13
Cotton stuffs .....	3	31,350	52
Gypsum articles .....	3	29,450	22
Brick kilns .....	2	23,340	60

## 4.—Industries of Poland for 1877—Continued.

## TOWN OF WARSAW—Continued.

Description.	Number of factories.	Value of produce.	Number of workmen.
		<i>Rubles.</i>	
Vinegar	2	22,800	5
Colored paper	1	13,800	43
Gold and silver, beaten	1	13,350	7
Horse mill	1	10,777	2
Billiards	1	10,000	8
Glue	1	8,000	15
Musical instruments	2	6,790	17
Mead	1	4,410	1
Types, printing	1	3,200	5
Wax linen	1	2,655	6
Firearms	1	2,500	5
Organs	1	1,600	4
Sawmill	1	.....	22
Total	243	21,135,129	12,226
Increase over 1876	6	3,197,414	2,229

## GOVERNMENT OF WARSAW.

Sugar	19	5,062,513	8,131
Mills, wind and water	1,395	3,650,335	1,499
Flax and hemp articles	1	1,560,000	3,070
Distilleries of spirits	54	1,894,645	321
Soap and candles	22	676,325	176
Brick kilns	63	530,550	1,158
Breweries	50	490,422	229
Paper mills	2	371,000	550
Mills, steam	11	367,700	84
Distilleries of rum and brandy	21	342,055	53
Chicory	3	174,600	95
Tanneries	48	117,880	87
Woolen stuffs	7	59,000	63
Chemicals	2	57,500	20
Earthenware	1	49,000	115
Agricultural implements	3	39,700	57
Oil mills	64	36,952	101
Starch	4	33,100	23
Sawmills	5	26,000	26
Vinegar	18	24,692	20
Glass works	1	17,200	10
Sattens	1	14,400	35
Dyers	5	14,297	19
Felt roofing	2	10,200	16
Pitch and tar	6	8,255	41
Tile, stove	2	7,500	12
Foundries, iron	1	6,100	10
Matches	2	5,300	30
Copper articles	1	5,063	6
Glue	1	4,940	8
Turf	4	4,890	50
Cheese	1	3,800	1
Small shot	1	3,700	4
Potters' articles	2	2,800	6
Mead	5	940	5
Cotton stuffs	1	700	1
Total	1,769	15,804,454	16,796
Increase over 1876	61	.....	364
Decrease	.....	642,155	.....

## GOVERNMENT OF KALISH.

Distilleries of spirits	89	2,759,820	399
Mills, wind and water	1,068	1,356,390	1,487
Sugar	5	952,000	956
Woolen stuffs	17	664,000	880
Cotton stuffs	5	580,000	513
Spinning machines	6	368,500	293
Paper mills	4	333,200	385

## 4.—Industries of Poland for 1877—Continued.

## GOVERNMENT OF KALISH—Continued.

Articles.	Number of factories.	Value of produce.	Number of workmen.
		<i>Rubles.</i>	
Distilleries of rum and brandy .....	8	316,500	40
Tanneries .....	50	213,750	171
Mills, steam .....	9	212,550	28
Breweries .....	35	179,043	143
Brick kilns .....	116	155,120	512
Glass works .....	3	155,000	316
Agricultural implements .....	10	128,880	137
Sawmills .....	5	124,320	68
Soap and candles .....	21	121,950	58
Carriages .....	1	112,000	13
Earthenware .....	5	100,000	250
Oil-mills .....	121	79,000	225
Tapes .....	4	57,400	90
Dyers .....	34	45,715	83
Cloths .....	16	43,000	44
Bones, burnt .....	1	22,300	17
Mead .....	23	23,283	33
Stove tiles and pots .....	62	21,005	107
Napping-machines .....	1	20,000	12
Glass works .....	1	18,000	5
Vinegar .....	18	16,520	30
Porcelain .....	1	16,000	18
Tallow .....	15	15,000	28
Pitch and tar .....	7	7,814	21
Matches .....	6	6,760	44
Starch .....	2	6,120	3
Pianos .....	1	6,000	7
Chicory .....	1	6,000	8
Flax and linen articles .....	6	3,700	13
Coppersmiths .....	3	2,400	7
Corks .....	1	1,000	3
Total .....	1,781	9,236,110	7,416
Increase over 1876 .....	1	824,160	
Decrease from 1876 .....			56

## GOVERNMENT OF PETROKOW.

Woolen stuffs .....	295	10,589,620	6,478
Cotton stuffs .....	1,966	9,918,240	12,826
Mills, wind and water .....	776	3,566,940	1,117
Distilleries of spirits .....	82	2,132,130	439
Coal mines .....	25	2,003,155	4,207
Bakers .....	298	1,081,540	596
Weavers' looms .....	5,798	1,008,040	6,304
Steam-mills .....	15	563,840	99
Iron mines .....	41	510,495	1,017
Distilleries of rum and brandy .....	10	509,370	121
Brick kilns .....	116	506,730	648
Sugar .....	3	451,160	1,186
Saw mills .....	94	443,200	443
Breweries .....	44	382,620	217
Agricultural implements .....	8	324,400	235
Lime and cement .....	82	300,600	543
Tanneries .....	112	295,040	229
Paper mills .....	12	211,690	133
Soap and candles .....	14	146,370	63
Ceruse (carbon of lead) .....	1	135,300	37
Oil-mills .....	45	128,320	114
Glass articles .....	4	97,210	163
Sirup .....	1	55,800	51
Chicory .....	5	29,190	39
Bones, articles of .....	2	31,200	53
Vinegar .....	11	23,910	30
Pitch and tar .....	8	23,830	22
Mead .....	7	9,130	16
Matches .....	1	8,000	19
Starch .....	1	4,680	16
Peat .....	2	3,670	13
Total .....	9,879	35,496,420	37,468
Increase over 1876 .....		2,798,874	2,077
Decrease from 1876 .....	368		

4.—*Industries of Poland for 1877—Continued.*

## GOVERNMENT OF LUBLIN.

Articles.	Number of factories.	Value of produce.	Number of workmen.
		<i>Rubles.</i>	
Distilleries of spirits.....	59	1,971,154	364
Mills, water and wind.....	308	908,991	436
Iron works.....	2	522,577	354
Steam-mills.....	9	418,940	50
Tobacco.....	2	309,190	312
Breweries.....	47	193,967	175
Sugar.....	3	178,342	1,060
Furniture.....	1	100,000	110
Tanneries.....	26	87,046	86
Turpentine.....	13	78,138	41
Brick kilns.....	80	75,362	264
Sawmills.....	33	74,157	72
Agricultural implements.....	7	67,361	110
Soap and candles.....	10	62,404	36
Glass articles.....	4	34,721	81
Floor.....	1	32,700	48
Starch.....	1	28,500	50
Oil mills.....	23	27,756	40
Ropes.....	1	21,636	32
Cloth.....	73	20,950	114
Paper mills.....	4	17,359	38
Nails.....	1	16,000	20
Yeast.....	1	9,000	9
Tiles, stove.....	1	6,060	7
Mead.....	8	5,039	9
Vinegar.....	6	4,925	13
Cheese.....	1	4,500	3
Pitch and tar.....	12	3,582	25
Lime.....	7	2,343	14
Shingles.....	1	1,800	6
Bone mills.....	1	1,050	4
Linen in prison.....	1	727	69
Artificial manure.....	1	600	3
Coppersmiths.....	1	500	3
Total.....	749	5,287,377	4,058
Increase over 1876.....	147	798,115	443

## GOVERNMENT OF RADOM.

Iron-works.....	57	2,810,656	2,419
Distilleries of spirits.....	24	488,998	215
Tanneries.....	32	416,045	248
Sugar.....	3	405,700	658
Steam-mills.....	9	376,446	144
Distilleries of rum and brandy.....	8	301,104	21
Breweries.....	27	135,896	120
Glass-works.....	5	76,993	57
Brick-kilns.....	19	74,235	105
Saw-mills.....	17	16,854	46
Agricultural implements.....	3	11,097	20
Lime.....	9	7,958	17
Matches.....	2	7,800	7
Cloth.....	3	7,462	6
Copper articles.....	2	7,155	7
Soap and candles.....	2	5,390	2
Oil-mills.....	10	5,149	16
Spoons.....	2	5,100	37
Earthenware.....	3	3,660	7
Pitch and tar.....	8	2,672	8
Paper-mills.....	2	2,420	10
Miscellaneous.....	9	6,627	17
Total.....	251	5,175,407	4,186
Increase over 1876.....		27,406	86
Decrease from 1876.....	34		

4.—*Industries of Poland for 1877*—Continued.

## GOVERNMENT OF KIELCE.

Articles.	Number of factories.	Value of produce.	Number of workmen.
		<i>Rubles.</i>	
Distilleries of spirits .....	38	1,021,063	229
Mills, wind and water .....	16	516,960	74
Cotton stuffs .....	1	500,000	1,100
Sugar .....	2	357,176	229
Steam-mills .....	1	189,000	14
Zinc .....	2	187,500	440
Saw-mills .....	60	162,143	143
Pig-iron .....	4	144,789	244
Breweries .....	32	143,211	104
Iron-works .....	10	116,830	94
Cloth .....	6	96,900	93
Paper-mills .....	1	76,000	67
Soap and candles .....	5	52,577	26
Tanneries .....	23	48,078	84
Engineering works .....	7	41,450	73
Brick-kilns .....	63	41,165	183
Glass-works .....	3	35,080	48
Brimstone .....	1	30,000	105
Chicory .....	1	25,000	17
Oil-mills .....	9	9,870	25
Lime .....	4	5,713	18
Pitch and tar .....	11	6,285	23
Pots, clay .....	20	5,560	30
Marble .....	5	4,587	72
Paper articles .....	8	3,825	28
Dyers .....	1	3,500	9
Tiles, stove .....	2	1,820	9
Mead .....	4	883	4
Vinegar .....	1	55	1
Total .....	341	3,827,000	3,582
Decrease from 1876 .....	17	759,499	206

## GOVERNMENT OF PLOCK.

Distilleries of spirits .....	20	673,713	125
Smelting furnaces .....	2	296,190	146
Breweries .....	41	169,635	132
Brick-kilns .....	90	154,500	337
Sugar .....	2	124,290	574
Steam-mills .....	4	106,900	12
Soap and candles .....	9	71,402	21
Saw-mills .....	17	63,224	63
Distilleries of rum and brandy .....	3	34,885	12
Agricultural implements .....	1	29,200	22
Tanneries .....	31	22,340	47
Glass-works .....	2	20,800	23
Iron-works .....	5	19,880	17
Oil-mills .....	15	10,802	29
Matches .....	1	9,050	35
Vinegar .....	11	6,421	11
Cement, articles of .....	1	5,000	19
Lime .....	1	3,000	3
Turpentine .....	4	1,960	4
Chicory .....	1	1,500	2
Paper articles .....	1	570	6
Total .....	262	1,837,562	1,641
Increase over 1876 .....	42		173
Decrease from 1876 .....		34,387	

## GOVERNMENT OF LOMZA.

Distilleries of spirits .....	37	906,854	208
Steam-mills .....	1	288,000	30
Wind-mills .....	95	165,850	109
Breweries .....	35	155,545	114
Water-mills .....	22	121,450	50
Sugar .....	2	106,000	45

4.—*Industries of Poland for 1877—Continued.*

## GOVERNMENT OF LOMZA—Continued.

Articles.	Number of factories.	Value of produce.	Number of workmen.
		<i>Rubles.</i>	
Distilleries of rum and brandy.....	2	55,300	9
Glass-works.....	4	51,700	56
Brick-kilns.....	36	42,660	108
Tanneries.....	25	23,382	45
Cloth.....	5	12,770	56
Pitch and tar.....	13	10,802	17
Iron.....	8	10,490	16
Saw-mills.....	4	9,390	10
Oil-mills.....	10	5,000	22
Vinegar.....	10	4,489	19
Soap and candles.....	7	4,800	9
Agricultural implements.....	2	2,770	11
Copper articles.....	1	980	2
Blotting-paper.....	1	700	5
Mead.....	2	600	2
Total.....	322	2,022,012	979
Increase over 1876.....	98	140,216	36

## GOVERNMENT OF SIEDLCE.

Distilleries of spirits.....	60	1,506,853	397
Steam-mills.....	5	214,863	31
Breweries.....	59	156,137	173
Glass-works.....	7	153,800	237
Sugar.....	1	139,178	400
Tanneries.....	51	79,975	109
Brick-kilns.....	61	60,855	193
Saw-mills.....	11	45,230	61
Wind-mills.....	44	43,525	64
Water-mills.....	14	26,376	20
Soap and candles.....	22	21,782	34
Shoe-pegs.....	1	30,000	56
Oil-mills.....	24	19,699	36
Cheese.....	5	7,698	16
Pitch and tar.....	10	7,191	33
Agricultural implements.....	1	5,500	7
Vinegar.....	9	4,475	11
Turpentine.....	3	3,576	17
Lime.....	2	2,496	5
Dyers.....	2	2,200	4
Horse-mills.....	3	2,120	5
Mead.....	4	1,300	6
Miscellaneous.....	5	1,617	4
Total.....	494	2,626,456	1,926
Increase over 1876.....	9	225,591	129

## GOVERNMENT OF SUWALKI.

Distilleries of spirits.....	54	832,327	321
Distilleries of rum and brandy.....	6	93,566	13
Breweries.....	39	72,702	100
Smelting furnaces.....	4	53,359	83
Glass-works.....	1	15,000	15
Iron-works.....	2	9,108	14
Linen.....	10	5,600	47
Coppersmiths.....	10	5,580	19
Total.....	126	1,087,142	612
Increase over 1876.....	9		41
Decrease from 1876.....		2,745	



4.—*Industries of Poland for 1877—Continued.*

## RECAPITULATION.

Governments.	Number of factories.	Value of produce.	Number of workmen.
		<i>Rubles.</i>	
Town of Warsaw .....	243	21, 135, 129	12, 226
Government of—			
Warsaw .....	1, 769	15, 804, 454	18, 736
Kalish .....	1, 781	9, 238, 110	7, 416
Petrokow .....	9, 879	35, 496, 420	37, 463
Lublin .....	749	5, 287, 377	4, 058
Radom .....	251	5, 175, 407	4, 186
Kielce .....	341	3, 827, 000	3, 582
Plock .....	262	1, 837, 562	1, 641
Lomza .....	322	2, 022, 012	919
Siedlce .....	404	2, 626, 456	1, 926
Suwalki .....	126	1, 087, 142	612
Total .....	16, 127	103, 535, 069	90, 765
Increase over 1876 .....		6, 573, 990	5, 855
Decrease from 1876 .....	46		

5.—*Table showing the agricultural produce sown in the Kingdom of Poland in 1877.*

Governments.	Winter wheat.	Rye.	Oats.	Barley.	Buckwheat.	Various spring corn.	Potatoes.
	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>
Warsaw .....	44, 921	235, 242	198, 211	32, 194	15, 600	26, 907	684, 888
Kalish .....	71, 428	256, 435	154, 610			101, 288	622, 267
Petrokow .....	42, 928	214, 055	182, 539	74, 028	18, 986	29, 455	570, 004
Lublin .....	75, 773	191, 437	183, 397	77, 692	50, 366	33, 081	214, 582
Radom .....	41, 198	163, 032	111, 180	50, 153	14, 463	22, 676	214, 872
Kielce .....	63, 361	143, 829	109, 524	78, 439	3, 866	16, 710	268, 831
Plock .....	65, 469	182, 647	138, 339	40, 667	18, 101	27, 109	334, 864
Lomza .....	46, 291	140, 604	89, 868	34, 056	15, 543	19, 875	304, 123
Siedlce .....	43, 373	162, 890	106, 316	48, 583	29, 333	22, 084	308, 444
Suwalki .....	17, 859	179, 636	144, 316	75, 585	7, 043	28, 288	293, 565
Total .....	512, 601	1, 870, 707	1, 368, 300	511, 367	173, 301	327, 478	3, 796, 443
Increase over 1876 .....	19, 730	34, 418		6, 816	5, 283	10, 894	39, 958
Decrease from 1876 .....			952				

6.—*Table showing the agricultural produce reaped in the Kingdom of Poland in 1877.*

Governments.	Winter wheat.	Rye.	Oats.	Barley.	Buckwheat.	Various spring corn.	Potatoes.
	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>	<i>Ochetwerts.</i>
Warsaw .....	254, 684	1, 241, 739	671, 854	121, 552	85, 280	89, 096	3, 416, 753
Kalish .....	427, 331	1, 409, 019	856, 965			461, 566	4, 645, 117
Petrokow .....	197, 226	900, 729	779, 235	288, 250	90, 791	116, 236	3, 305, 581
Lublin .....	359, 650	844, 998	669, 714	364, 391	197, 848	137, 629	1, 340, 062
Radom .....	182, 409	595, 588	423, 978	197, 105	65, 545	112, 150	1, 012, 747
Kielce .....	252, 467	566, 084	427, 415	261, 067	12, 676	71, 547	1, 404, 507
Plock .....	386, 480	1, 036, 707	684, 983	196, 079	109, 670	152, 122	1, 871, 630
Lomza .....	268, 641	713, 601	427, 720	196, 489	81, 964	100, 861	1, 867, 852
Siedlce .....	175, 094	704, 554	408, 361	171, 893	106, 237	84, 679	1, 569, 422
Suwalki .....	84, 271	849, 154	727, 545	340, 560	28, 218	144, 127	1, 610, 071
Total .....	2, 588, 253	8, 862, 173	6, 077, 770	2, 137, 396	778, 209	1, 470, 043	22, 043, 742
Increase over 1876 .....	111, 758	800, 062			32, 150		893, 519
Decrease from 1876 .....			420, 137	222, 702		40, 021	

7.—Table showing the population of the Kingdom of Poland for the year 1877.

Governments.				Births.			Deaths.			Marriages.
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	
Town of Warsaw .....	148,856	166,343	315,199	5,935	4,841	10,776	5,481	4,754	10,235	2,124
Government of Warsaw .....	424,965	444,085	869,050	16,853	15,931	32,784	10,244	9,731	19,975	5,037
Kalish .....	350,483	374,658	725,141	13,599	13,802	27,401	7,884	7,747	15,631	5,379
Petrokow .....	879,717	400,755	780,472	15,568	15,017	30,585	8,989	8,954	17,943	5,224
Lublin .....	383,504	406,460	789,964	15,572	16,079	31,651	10,996	10,451	21,447	5,905
Kielce .....	225,198	301,196	586,394	11,287	11,541	22,828	6,949	7,187	14,129	4,581
Plock .....	241,870	263,455	505,325	10,737	10,307	21,044	6,658	6,392	13,050	4,234
Lomza .....	.....	.....	522,395	9,909	9,863	19,772	5,961	6,080	12,041	3,955
Siedlce .....	285,237	303,631	588,868	13,330	13,870	27,200	6,683	6,841	13,524	3,188
Suwalki .....	.....	.....	581,662	9,956	9,340	19,296	6,332	5,995	12,327	3,295
Radom .....	291,231	304,425	595,656	12,771	12,356	25,127	7,788	7,648	15,436	3,758
Total .....	.....	.....	6,860,126	.....	.....	268,554	.....	.....	165,738	46,580
Increase over 1876 .....	.....	.....	104,251	.....	.....	.....	.....	.....	5,784	.....
Decrease from 1876 .....	.....	.....	.....	.....	.....	5,066	.....	.....	.....	9,572

8.—Table showing the cattle disease in the Kingdom of Poland for the year 1877.

Governments.	Number of localities infected.	Number of sick cattle.	Died.	Killed.	Killed for precaution.	Number of recovered.
Town of Warsaw .....	1	38	4	9	15	.....
Government of Warsaw .....	46	474	119	353	474	3
Petrokow .....	22	272	71	201	514	.....
Radom .....	1	28	16	81	.....	1
Plock .....	1	4	.....	.....	.....	.....
Lomza .....	3	33	11	22	38	.....
Siedlce .....	2	96	9	87	94	.....
Total .....	76	945	230	753	1,135	8
Decrease from 1876 .....	51	615	1,051	.....	.....	193

9.—Table showing the produce of sugar in the Kingdom of Poland for the year 1877.

Governments.	Value of produce.	Number of factories.	Number of workmen.
Warsaw .....	Rubles. 5,682,513	19	8,131
Kalish .....	952,000	5	956
Petrokow .....	451,160	5	1,186
Lublin .....	178,342	3	1,060
Radom .....	405,700	3	658
Kielce .....	357,176	2	220
Plock .....	136,290	2	574
Lomza .....	106,000	2	45
Siedlce .....	189,178	1	400
Total .....	8,388,359	40	13,230
Increase over 1876 .....	.....	.....	386
Decrease from 1876 .....	1,023,663	1	.....

10.—Statement showing the number of the different schools and scholars in the Kingdom of Poland for 1877.

Governments.	University.	Imperial female in- stitution.	Mathematical gym- nasium.	Philological gymna- sium.	Female gymnasium.	Male progymnasium.	Female progymna- sium.	Teachers' seminary.	Commercial Sunday- school.	Deaf and dumb insti- tution.	Lutheran schools.	Drawing schools.	Veterinary school.	Roman Catholic Sem- inary.	Upper working-class school.	Sunday working- class school.	Agricultural institu- tion.	Private schools and boarding-schools.	Jewish schools.	Elementary schools.	Number of schools.	Total.		
																						Male.	Female.	
Town of War- saw.	1 643	1 247	1 403	2,506 6	4 1,182	2 405	1 183	1 39	1 526	1 142	1 86	1 280	1 122	1 45	1 4,260	1 4,260	1 3,642	151 4,819 5,642	12 207 378	8 428 243	1 148	174	14,304	7,340
Government of Warsaw.			511				1	2			102 488 367	1 280	1 122	1 45	1 4,260	1 4,260	1 3,642	12 207 378	8 428 243	1 148	483	14,460	8,066	
Kalish.				423	1			2	1		1,420 1,049				10	717		20 447 316	20 447 316	9 814	416	13,498	8,380	
Petrokow.				362		252	188	1			362 1,049	94			13	987		21 690 768	8 428 243	8 427	531	20,336	13,227	
Lublin.				600	1	261	1	2	22		600 1,049	768		86	310	144	1	10 151 73	1 101 151	1 222	405	12,805	4,968	
Radom.				419	1	186	1	1	47		270 242				857	11		10 105	5 181	5 181	178	6,382	3,749	
Kielce.				371		158	112	2	142		371 1,049				338	11		67 108	8 108	8 108	307	11,106	6,179	
Plock.				487	1			2	131	11					641	10		63 865	3 150	3 150	301	10,848	5,829	
Lomza.				501		159	113	1							205	6		91 203	11 203	11 203	185	6,999	2,081	
Siedlce.				631	2	1		107							141	5		54 75	5 75	5 75	278	9,117	3,010	
Suwalki.				706	2	1		190							225	5		4 4	4 4	4 4	193	8,695	1,999	
Total.																					3,461	128,605	65,423	
Increase over 1876.																					88	78	1,871	

11.—Table showing the average prices of the different articles of food, &amp;c., in the Warsaw market for the year 1877.

Articles.	Rubles.	Articles.	Rubles.
Wheat . . . . . per chetwert.	14. 96	Sheep . . . . . per head.	2. 06
Rye . . . . . do.	8. 64	Pig, fat . . . . . do.	1. 20
Barley . . . . . do.	7. 70	Pig, medium . . . . . do.	. 80
Oats . . . . . do.	5. 02	Pig, lean . . . . . do.	. 69
Buckwheat . . . . . do.	6. 07	Horse, carriage . . . . . do.	120. 00
Pease . . . . . do.	10. 19	Horse, cart . . . . . do.	80. 00
Beans . . . . . do.	12. 81	Ox-hide . . . . . per piece.	11. 00
Potatoes . . . . . do.	8. 15	Horse-hide . . . . . do.	8. 54
Beet-roots . . . . . do.	2. 90	Calf-hide . . . . . do.	1. 29
Salt . . . . . per pound.	. 03	Sheepskin . . . . . do.	. 60
Beef . . . . . do.	. 11	Wood, hard . . . . . per klafter.	12. 00
Pork . . . . . do.	. 14	Wood, soft . . . . . do.	10. 00
Veal . . . . . do.	12½	Flour, wheat . . . . . per pood.	2. 26
Mutton . . . . . do.	. 11	Flour, rye . . . . . do.	7. 64
Lard . . . . . do.	. 21	Tallow . . . . . do.	. 45
Butter . . . . . do.	37½	Naphtha . . . . . per viedro.	1. 95
Candles, stearine . . . . . do.	31	Spirits, 78 per cent. . . . . do.	9. 07½
Candles, tallow . . . . . do.	20	Spirits, 45 per cent. . . . . do.	4. 21
Candles, wax . . . . . do.	75	Vinegar . . . . . do.	1. 05
Bread, white . . . . . do.	. 04	Coals . . . . . per chetwert.	1. 45
Bread, black . . . . . do.	. 03	Bricks . . . . . per 1,000.	15. 00
Soap, common . . . . . do.	. 13	Lime . . . . . per pood.	. 60
Ox, fat . . . . . per head.	94. 00	A day laborer . . . . . per diem.	. 60
Ox, medium . . . . . do.	70. 00	A two-horse cart . . . . . do.	4. 50
Ox, lean . . . . . do.	50. 00	A one-horse cart . . . . . do.	3. 50
Calf . . . . . do.	7. 87		

## REVAL.

*Report, by Consular Agent Mayer, on the trade and commerce of Reval for the year 1879.*

I have the honor to transmit my annual report for the year ending December 31, 1879, and beg to inclose herewith the following lists:

A 1.—List of imports, for which the duty is paid at Reval, amounting to a value of 94,531,441.20 rubles, against 84,214,702 rubles in 1878, the duty for same in gold amounting to 5,455,941.54 rubles, against 3,162,734 rubles in 1878.

A 2.—List of imports (transit goods), for which the duty is paid at the place of destination, amounting to a value of 19,438,239 rubles, against 18,937,423 rubles in 1878.

B.—List of exports, amounting to a value of 26,502,379 rubles against 21,709,557 rubles in 1878.

C.—Statement showing the navigation at Reval, according to which 547 steamers and 310 sailing vessels, of the burden of 417,724 tons register, arrived here from foreign ports, and 566 steamers and 311 sailing vessels, of the burden of 416,372 tons register, left our port for foreign ports, which vessels show an aggregate amount of tonnage of 51,300 tons register over that of the preceding year (1878).

Besides these the commerce of Reval with the neighboring ports of Russia and Finland was carried on by 2,034 steamers and sailing vessels, the value of which interior commerce is not included in above figures.

## INCREASE IN THE IMPORT TRADE.

I have in my preceding annual reports already pointed out the continual progress and extraordinary prosperity of the trade of Reval, and this year again I have the satisfaction to report an enormous increase in imports and exports.

One of the principal causes which have favored import trade is due partly to the incessant wants of materials and of raw products for the manufactories in the interior of Russia, which industry has been largely developed, being favored by the protective duties and by its progress in efficiency, which secures great benefits to the manufactories of special branches, particularly those of weaving goods.

Another cause which has greatly favored imports has been the good results which were obtained at the fair of Nishi-Novgorod. The transactions at this fair have surpassed all those of preceding years. The protective duties and the low exchange of our paper ruble, which favor this extension of trade, will, however, probably stimulate it to an extent which, if I am not in error, will cause a reaction sooner or later, same as now depresses the markets of manufactured goods abroad.

The largest increase in imports has to be noted in cotton, as well as in iron, manufactured goods, machinery, wine, and grocery wares, whilst tea has not been imported to the same extent as in preceding years.

Of special note is the fact that cotton was imported last year mostly in steamers, while in preceding years it was only shipped by sailing vessels.

#### EXPORT TRADE.

The export trade shows an increase, as the demand from abroad for Russian products, especially for corn, was favored by bad crops almost over all Europe. During all the autumn export trade was very brisk and continued so to the end of the year, as our port was accessible, without being hindered by ice, which blocked our roads only for a couple of days and forming no obstacle to steamers.

Of special interest for this consulate is the fact that a considerable quantity of Russian wool has been exported from our port, via Hull, to the United States during the past year, and it appears that the business relations between this country and the United States assume larger dimensions from year to year, and all the commerce between America and Russia passing almost entirely through the port of Reval.

The aggregate amount of tonnage of vessels entered and of vessels cleared at our port is also larger than at any preceding year.

#### CROPS.

The crops of 1878 were not very plentiful and those of 1879 did not show a better result, especially as the crops of potatoes failed entirely. These are especially used for distilling purposes. While, under normal circumstances, the price for potatoes is 80 copecks per measure, it has risen this year to 2 rubles 50 copecks. Distillers were therefore obliged to use wheat and rye, the refuse of which is not as advantageous for feeding cattle.

This winter has been very mild and has favored our navigation, especially as steamers entered and left our port during January and February, taking in cargoes of grain.

WALDR. MAYER.

UNITED STATES CONSULAR AGENCY,  
*Reval, February 23, 1880.*

A 1.—Statement showing the commerce at Rerval for the year ending December 31, 1879.

## IMPORTS.

Articles.	Quantity.	Value.	Duty.	Whence imported.
		<i>Paper rubles. Cop.</i>	<i>Gold rubles. Cop.</i>	
Coals .....poods.	2,687,861	426,857 00		England, Germany.
Fire-bricks .....pieces.	665,418	18,225 00		England, Germany, Holland, Denmark.
Vegetables, seeds, and plants, poods.	70,724	375,645 00		France, England, Germany, Holland, Belgium.
Common wooden works and basket works, poods.	51,677	105,475 00		England, Germany, Holland, Italy.
Books, music, and pictures do..	7,402	141,225 00		France, England, Germany.
Machinery:				
Free of duty .....poods.	1,122,507	12,345,650 00		France, England, Germany, Holland.
Paying duty .....do...	303,408	3,054,620 00	91,465 01	France, England, Germany, Holland, Sweden, Finland.
Hides, raw and dried .....do...	118,800	318,525 00		France.
Cotton .....do...	3,220,375	35,421,175 00	1,184,038 40	America, England, France, Holland.
Clay, earth, potash, soda, ce- ment, and articles of no great value, poods.	241,255	545,615 00	2,029 60	England, Germany, Holland.
Salt .....poods.	219,665	200,775 00	91,595 23	England, Germany, Spain, Portugal, Sweden.
Herring and fish .....do...	2,695	6,570 00	29,165 91	France, England, Germany, Holland, Sweden.
Coffee and cocoa .....poods.	18,637 1/2	280,175 00		
Tea .....do...	24,167	481,775 00	37,240 54	England, Germany, Holland.
Tobacco and cigars .....do...	9,787	391,225 00	151,130 60	England, Germany.
Arac, rum, and cognac:	559	54,725 00	18,164 63	Germany.
In casks .....poods.	804	16,075 00	7,978 17	France, England, Germany, Holland.
In bottles .....bottles.	7,238	6,975 00	4,921 84	France, England, Germany, Holland, Finland.
Wine:				
In casks .....poods.	21,252	319,750 00	43,880 40	France, England, Germany, Holland, Spain.
In bottles .....bottles.	12,305	12,575 00	4,060 65	France, England, Germany, Holland, America.
Champagne in bottles .....do...	16,928	51,775 00	16,928 00	France, England, Germany, Holland.
Porter and ale:				
In casks .....casks.	954	8,750 00	954 29	England, Germany.
In bottles .....bottles.	3,585	3,585 00	637 75	England.
Mineral water .....do...	251,719	75,775 00	5,034 88	France, Germany, Holland.
Juice of fruits .....poods.	105	725 00	108 26	England, Germany.
Leather and furs .....do...	35,861	717,525 00	186,282 49	France, England, Germany, Holland.
Rice, sago, &c. ....do...	26,945	91,825 00	13,306 34	England, Germany, Holland.
Cheese .....do...	2,468	39,540 00	10,125 20	France, England, Germany, Holland.
Fruits .....do...	67,827	469,575 00	29,140 21	France, America, Germany, Holland, Italy, Spain.
Preserved fruits, &c. ....do...	1,898	17,925 00	5,770 22	Germany, England, France, Holland.
Oysters .....do...	1,108	10,875 00	1,219 41	Germany, England, Denmark.
Oils of various kinds .....do...	22,099	145,845 00	210,967 61	Germany, England, France, Holland, Italy, Spain.
Petroleum and turpentine do..	64,557	129,275 00	35,140 40	Germany, England, France, Italy, America.
Spices .....do...	13,822	175,840 00	21,430 82	Germany, England, Holland.
Wax, gum, and rosin .....do...	98,833	1,025,340 00	25,329 15	Germany, England, Holland, France, America.
Drugs and chemical products, poods.	355,696	1,567,825 00	156,933 71	Germany, England, Holland, France, Italy, Finland.
Dyeing materials and colors, poods.	36,955	345,975 00	320,373 47	Germany, England, Holland, France, Italy.
Yarns of cotton, wool, silk, and flax, poods.	463,876	19,725,125 00	1,260,469 01	Germany, England, Holland, France.
Manufactured goods:				
Of silk, wool, and cotton, poods.	24,628	2,175,340 00	380,595 24	Germany, England, Holland, France, Belgium, Finland.
Of flax .....do...		388,283 60	116,452 08	Germany, England, Holland.
Ready-made clothes .....do...		31,625 60	10,069 47	Germany, England, France, Italy.
Of codilla and jute..poods.	212,966	1,064,830 00	98,958 60	Germany, England, France, Belgium.
Of leather, paper, hair, &c., poods.	16,529	164,745 00	68,075 66	Germany, England, France, Holland, Sweden, Finland.

## A 1.—Statement showing the commerce at Reval, &amp;c.—Continued.

## IMPORTS—Continued.

Articles.	Quantity.	Value.	Duty.	Whence imported.
		<i>Paper rubles. Cop.</i>	<i>Gold rubles. Cop.</i>	
Manufactured goods:				
Of marble, &c. .... poods.	10, 616	75, 825 00	4, 552 94	Germany, England, France, Holland.
Of porcelain { .... poods.	13, 374	345, 275 00	28, 245 98	Do.
and glass. { sq. inches	113, 399			
Of copper, bronze, zinc, steel, and iron, poods.	12	1, 825, 740 00	253, 891 41	Germany, England, France, Holland, Sweden, Finland.
Hardware and fancy goods, poods.	193, 950	461, 345 00	78, 678 25	Germany, England, France, Holland, Finland.
Hats, caps, umbrellas ... pieces.	7, 563	8, 475 00	1, 260 15	Germany.
Soap and perfumery .... poods.	1, 523	95, 145 00	13, 545 71	Germany, England, France, Holland, Finland.
Cordage and ropes. .... do.	9, 423	125, 340 00	16, 069 52	Germany, England, Holland.
Carpenter's and turn- { arabin	544	285, 925 00	12, 716 25	{ Germany, England, France, Holland, Finland.
er's works. { poods.	27, 957			
Wood and corkwood. .... do.	20, 583	98, 165 60	5, 073 48	Germany, England, France, Holland, America.
Raw metals: copper, steel, iron, tin, zinc, &c., poods.	1, 673, 008	8, 080, 725 00	378, 118 77	Germany, England, France, Holland, Sweden.
Musical instruments { pieces	1, 040	75, 840 00	12, 097 07	{ Germany, England, France, Finland.
pieces	784			
Clocks and parts of { pieces	4, 199	75, 450 00	1, 765 35	{ Germany, England, France, Holland.
clocks. { poods.	37			
Carriages and wagons { pieces	18	10, 750 00	2, 033 99	Germany, England.
poods.	7			
Sundries ..... { pieces	470	15, 875 00	3, 019 54	{ Germany, England, France, Holland, Finland.
bottles.	199			
		94, 531, 441 20	5, 455, 941 54	

## A 2.—Importation of transit goods bound to St. Petersburg and Moscow for which the duty is paid at the place of destination.

Articles.	Quantity.	Value entered.	Whence imported.
		<i>Rubles. Cop.</i>	
Machinery ..... poods.	80, 943	809, 400 00	Holland, Germany, England, France.
Coffee and cocoa ..... do.	18, 075	336, 125 00	Germany, Holland, England.
Tobacco and cigars ..... do.	1, 698	115, 675 00	Germany, Holland, England, France.
Tee ..... do.	97, 013	2, 849, 623 00	Do.
Arrac, rum, cognac:			
In casks ..... poods.	3, 011	35, 210 00	Do.
In bottles ..... bottles.	17, 696	19, 815 00	Do.
Champagne, in bottles ..... do.	108, 586	435, 210 00	Do.
Wine:			
In bottles ..... bottles.	37, 679	38, 725 00	{ Germany, Holland, England, France, Spain, Italy.
In casks ..... poods.	100, 139	2, 110, 655 00	
Leather ..... do.	11, 060	442, 425 00	Germany, Holland, England, France.
Yarns of cotton, wool, silk, and flax, poods.	195, 224	3, 387, 564 00	Do.
Manufactured goods of cotton, wool, silk, and flax, poods.	22, 342	1, 117, 115 00	Do.
Copper, steel, iron, and tin goods, poods.	61, 825	619, 740 00	Do.
Paper, leather, and gutta-percha goods, poods.	4, 648	69, 415 00	Do.
Fancy goods ..... poods.	1, 291	38, 775 00	Do.
Glass and porcelain ..... do.	13, 436	154, 045 00	Do.
Raw metals:			
Copper and steel ..... poods.	121, 193	1, 223, 490 00	Do.
Lead, iron, and tin ..... do.	44, 959	225, 650 00	Do.
Tin plates ..... do.	17, 547	84, 840 00	Germany, Holland, England.
Oil ..... do.	271, 412	2, 763, 425 00	Germany, Holland, England, France, Italy.
Dyeing materials and colors ..... do.	81, 934	430, 635 00	Germany, Holland, England, France, Spain.
Logwood ..... do.	14, 413	72, 845 00	Germany, Holland, France.
Chemical products ..... do.	18, 371	71, 725 00	Germany, Holland, France, England.
Drugs and spices ..... do.	19, 989	101, 240 00	Do.
Cheese ..... do.	7, 606	93, 415 00	Germany, Holland, England.





## B.—Statement showing the commerce of Reval, &amp;c.—Continued.

## EXPORTS—Continued.

Articles.	Quantity.	Free on board, value.	Whither exported.
		<i>Rubles.</i>	
Machinery oil and grease ..... poods.	88, 463	417, 315	Germany, Holland, France.
Drugs ..... do.	3, 763	37, 000	Germany, England.
Anise oil ..... do.	40	1, 500	Germany, England, France.
Aniseed ..... do.	11, 344	15, 000	Do.
Licorice wood ..... do.	546	1, 000	Germany.
Sundry seeds ..... do.	14, 709	314, 709	Germany, England.
	35, 308		
Metal shavings ..... do.	374	700	Germany.
Tar ..... casks.	15	150	Germany, England.
Tongs ..... poods.	227	1, 000	Do.
Hops ..... do.	1, 150	34, 500	England.
Cordage ..... do.	11, 056	442, 240	Germany, England, France.
Sail-cloth ..... do.	1, 926	38, 520	Germany, Holland.
Bones, &c ..... do.	33, 110	75, 000	Germany, England, Scotland.
Manufactured goods ..... do.	1, 160	11, 600	Germany, England.
Hemp yarns, &c ..... do.	2, 395	25, 000	Germany, England, Holland.
Wool ..... do.	29, 560	236, 480	Do.
Tallow ..... do.	771	4, 626	Germany, Holland.
Furs ..... do.	2, 132	100, 000	Germany, England.
Soap ..... do.	1, 653	5, 000	Germany.
Blood ..... do.	7, 764	40, 000	Do.
Hides, &c ..... do.	11, 621	85, 000	Germany, England, France.
Isinglass ..... do.	129	6, 450	Germany, England.
Mats ..... do.	11, 143	66, 000	Do.
Phosphate and manure ..... do.	26, 571	30, 000	Holland.
Camel hairs and cow hairs ..... do.	43, 403	335, 000	Germany, England, Holland.
Planks of birchwood ..... pieces	9, 525	11, 500	Germany, England.
Glycerine ..... poods	14, 037	50, 000	Germany, Holland.
Yellow of eggs ..... do.	1, 797	7, 188	Germany.
Felt ..... do.	7, 925	47, 550	Do.
Caviare ..... do.	17	1, 700	Germany, England.
Leather ..... do.	162	1, 600	Germany, England, France.
Copper plates ..... do.	1, 286	12, 860	England.
Mineral earth ..... do.	4, 559	4, 000	Germany, Holland.
Sundries ..... do.	18, 369	401, 700	
		26, 502, 379	

C.—Statement showing the navigation at the port of Rerol for the year ending December 31, 1879.

Flag.	From or to—	ENTERED.						CLEARED.					
		Steamers.			Sailing vessels.			Steamers.			Sailing vessels.		
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
German	Germany	117	47,022	33	3,374	150	50,396	76	27,173	29	3,972	105	31,144
	Russia	1	1,304	.....	.....	8	6,862	51	23,510	5	942	56	26,152
	England	8	6,962	.....	.....	1	.....	5	6,402	6	710	11	7,112
	Scotland	1	894	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
	France	2	1,832	2	316	4	2,713	1	248	1	138	2	488
	Holland	3	2,718	.....	.....	3	2,713	5	4,380	3	368	8	4,768
	Sweden	4	1,220	3	410	7	1,636	2	1,276	7	2,870	9	4,148
	Denmark	4	2,412	.....	.....	4	2,612	2	1,276	1	182	3	1,418
	America	1	2,342	5	3,512	6	5,854	.....	.....	.....	.....	.....	.....
	Italy	.....	.....	2	456	3	456	.....	.....	.....	.....	.....	.....
English	Spain	.....	.....	1	780	4	780	.....	.....	.....	.....	.....	.....
	Turkey	.....	.....	1	164	1	164	.....	.....	.....	.....	.....	.....
	Asia	.....	.....	1	130	1	130	.....	.....	.....	.....	.....	.....
	England	127	133,852	6	2,100	133	136,052	46	52,686	4	846	50	53,532
	America	17	26,566	3	3,472	20	30,068	.....	.....	.....	.....	.....	.....
	Scotland	2	1,054	.....	.....	2	1,054	2	1,420	.....	.....	2	1,420
	France	2	1,076	.....	.....	2	1,076	3	1,644	1	416	4	2,060
	Sweden	2	1,552	.....	.....	2	1,552	4	4,374	7	4,970	11	9,344
	Denmark	1	908	.....	.....	1	908	2	3,080	.....	.....	2	3,080
	Germany	3	1,938	.....	.....	3	1,938	15	14,650	1	330	16	14,980
Russian	Russia	3	2,560	.....	.....	3	2,560	48	53,158	2	472	50	53,630
	Africa	1	928	.....	.....	1	928	.....	.....	.....	.....	.....	.....
	Holland	.....	.....	.....	.....	.....	.....	36	37,852	.....	.....	36	37,852
	Italy	.....	.....	4	1,092	4	1,092	.....	.....	.....	.....	.....	.....
	Turkey	.....	.....	2	370	2	370	.....	.....	.....	.....	.....	.....
	England	6	3,126	6	1,762	12	4,888	3	1,566	1	456	4	2,032
	Germany	34	9,430	4	1,070	38	10,500	61	12,436	6	1,943	67	14,384
	Sweden	4	1,238	5	1,046	9	2,284	3	568	6	1,362	9	1,950
	Denmark	1	372	1	286	2	658	1	532	2	444	3	976
	Russia	2	816	3	346	5	1,163	1	654	11	2,760	12	3,414
Russian	France	1	654	.....	.....	1	654	.....	.....	.....	.....	1	654
	Holland	3	1,718	.....	.....	3	1,718	.....	.....	.....	.....	.....	.....
	Scotland	.....	.....	.....	.....	.....	.....	2	1,370	.....	.....	2	1,370
	Spain	.....	.....	1	456	1	456	.....	.....	.....	.....	.....	.....
	America	.....	.....	1	708	1	708	.....	.....	.....	.....	.....	.....
	Belgium	.....	.....	1	242	1	242	.....	.....	.....	.....	.....	.....
	Italy	.....	.....	1	248	1	248	.....	.....	.....	.....	.....	.....
	Norway	.....	.....	2	504	2	504	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

C.—Statement showing the navigation at the port of *Roval* for the year ending *December 31, 1879*—Continued.

Flag.	From or to—	ENTERED.				CLEARED.			
		Steamers.		Sailing vessels.		Steamers.		Sailing vessels.	
		No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Norwegian	Denmark	1	353	1	353	2	950	2	950
	France	2	1,116	3	1,876	1	254	1	254
	Germany	8	2,396	2	268	6	2,023	10	3,414
	Norway			28	3,614	42	10,796	48	12,482
	Russia					6	1,758	16	5,452
	Italy			5	1,390	15	5,694		
	Turkey			3	894				
	Scotland			3	824			2	252
	England			1	180	3	664	8	664
	America			8	1,732				
American	America	21	11,940	21	11,940	3	4,050	3	4,050
	Sweden	16	19,035	16	19,035	9	10,440	9	10,440
	Russia					3	4,016	3	4,016
	Scotland					1	532	1	532
	France	8	2,692	1	86	8	2,692	10	2,916
	Italy			1	136				
	Italy			3	854				
	Russia							1	300
	Holland			20	1,984	2	654	2	654
	Germany	8	4,316	28	6,300	20	1,798	29	6,190
Danish	England	3	3,140	3	3,140	2	2,410	4	2,680
	Sweden	1	133	8	622	2	210	4	4,388
	Denmark	2	2,164	62	6,390	84	4,350	85	4,388
	Holland	3	1,206	3	1,206	30	2,940	30	2,940
	Spain	1	880	1	128	2	1,878	4	2,188
	France	2	1,710	2	812	2	1,560	2	1,560
	Russia			2	2,522	4	4,124	9	5,214
	America			1	728				
	Scotland					1	118	1	118
	Holland	22	16,776	22	16,776	5	3,954	6	3,430
Dutch	Germany	1	564	3	782	2	1,770	3	2,308
	Denmark	1	1,128	1	1,184			2	152
	Russia					15	11,468	1	11,622
	England					1	1,128	1	1,128
	Italy			5	676				
	France			2	300				
	Sweden							4	480



## POLYNESIA.

## HAWAIIAN ISLANDS.

*Report, by Consul Morton, of Honolulu, on the commerce and industries of the Hawaiian Islands, for the year 1879.*

The production of sugar and rice on the islands during the year has materially increased, while there has been a noteworthy falling off in nearly all other domestic exports. These facts clearly indicate the direction in which the energies of this people are directed at the present time.

## THE SUGAR INDUSTRY OF THE HAWAIIAN ISLANDS.

An abundance of rain throughout the kingdom during the past season has generally favored the pursuit of this industry.

During the twelve months ending September 30, 1879, the whole amount of sugar exported from the country was 45,647,796 pounds, while during the previous year the total shipments were 35,957,273 pounds, showing an increase of shipments this year over those of the past of 9,690,523 pounds.

The value of all sugar shipped to the United States during the year is found to be \$3,066,848.24, which is an excess in value over exports of the previous year of \$480,723.96.

The excess of exports of 1879 over those of 1875 is equivalent to 21,379,800 pounds, and the value of all exports to the United States exceeds in value those of 1875 by \$1,913,127.62.

With a view of extending the comparison still further, I present the following table, compiled from information received from various sources, and largely from data furnished by Hon. J. S. Walker, of this city, a gentleman thoroughly conversant with the industrial interests of the country. It should be stated that the table is only approximately correct, as it has been impossible to obtain accurate data in this connection :

Islands.	Total area in acres.	Number of plantations.	Number of acres cultivated, 1874.	Number of laborers.	Number of plantations.	Number of acres cultivated, 1879.	Estimated crop, 1880.
							Tons.
Mauī.....	488,400	12	6,450	1,715	12	6,800	12,460
Kauaī.....	377,600	4	730	325	7	3,230	7,275
Oahu.....	384,000	7	1,265	386	8	1,420	3,270
Molokai.....	172,800	.....	.....	.....	8	250	400
Hawaii.....	2,694,400	12	3,780	1,361	24	11,580	21,550
Lanai.....	96,000	.....	.....	.....	.....	.....	.....
Niihau.....	62,080	.....	.....	.....	.....	.....	.....
Kahoolawe.....	40,320	.....	.....	.....	.....	.....	.....
Total.....	4,813,600	35	12,225	3,787	55	22,790	44,965

*Number of laborers.*—Thirty-one plantations, having under cultivation 9,940 acres of land, report 3,249 laborers at present employed. In a like ratio the whole number of acres under cultivation on the islands would require between 7,600 and 8,000 laborers.

It may be said here that the whole crop of sugar for 1880 has been sold in advance to the California Sugar Refinery, of San Francisco, ex-

cepting about 1,500 tons, which will go to Oregon. I have found it impossible to obtain any reliable data upon which to base an estimate as to the amount of virgin lands in the kingdom which may yet be made available for the culture of sugar cane.

On the island of Maui, which I visited last August, I ascertained that the most desirable lands have already been, or are about to be, brought into use—that is to say, such lands which, in addition to possessing a proper character of soil, lie contiguous to, or within easy access of, favorable shipping points, and where the natural rain-fall is sufficient for the purpose, or where facilities are afforded for artificial irrigation.

There are in all thirteen plantations on the island of Maui at the present time, eight or nine of which irrigate either wholly or in part by artificial means. For this purpose, as well as I could learn, nearly all the available water-courses have been brought into use.

During the past year there has been in process of construction on the island a large irrigating ditch, which is now substantially completed, and which will soon be brought into active use to conduct water from certain streams in Eastern Maui to a large tract of rich land known as the Waikapu Common. This ditch has been built by the Hawaiian Commercial Company, with California capital, at a cost, as I am informed, of about one million dollars. Its dimensions are as follows: length, 16 to 18 miles; width at top, 13 feet; width at bottom, 9 feet; depth, 4 feet. It is variously estimated that it will carry water sufficient to irrigate 2,000 to 5,000 acres. In the tract of land to which reference is made, there are thought to be about 10,000 acres which, with plenty of water, may be made to produce good crops of cane.

Another important enterprise on this island has been in progress during the year, being one of the direct results of the great impetus which has recently been given to this industry, viz, the construction of a narrow-gauge railroad from the town of Wailuku, which is the second in size in the kingdom, and near which are a number of large and flourishing plantations, to Kahului, a port of entry, and the most favorable shipping point on the island. The road is now being extended a distance of ten or twelve miles in the direction of large plantations in the district of Makawao, including the new plantations of the Hawaiian Commercial Company, and when completed will furnish means of transportation to the port of Kahului for nearly all the sugars manufactured in East Maui. The road is now in active operation between Wailuku and Kahului, a distance of three miles.

On the island of Kauai, chiefly on the northern and eastern margins, there is yet considerable land which may be utilized for the growth of cane, probably twice as much as is now under cultivation on the island. The plantations here, with one or two exceptions, require irrigation. There are many fine streams on the island whose waters may be diverted and brought into use for this purpose.

I beg to quote the following interesting letter, relative to the conditions on this island, from Hon. J. Hardy, circuit judge, fourth circuit, Hawaiian Islands:

KOLOA, KAUAI, November 24, 1879.

DEAR SIR: I did not immediately reply to your courteous letter of inquiry respecting the amount of non-utilized land on this island suited to the production of sugar and susceptible of irrigation, for the reason that I hoped to obtain fuller and more definite information. But from various causes I have not been able to get what I wanted in this respect, and I can only give you such general impressions and estimates as my own observations afford. I may say, however, that I have compared notes with some of our intelligent planters, and their opinions are in substantial accordance with my own. I do not pretend to give anything more than rough estimate.

No. 1. Beginning at Waimea district, from the Waimea River westward to Mauna, there are, say, 3,000 acres of excellent cane land that could be irrigated by the Waimea River. Cost of irrigation works, \$125,000.

No. 2. Eastward from Waimea River to Hauapepe gulch, irrigable from the Makaweli and Hauapepe Rivers, say 3,000 acres first-class land. Cost of irrigation works, \$125,000. (In No. 1 Mr. Kundsén has commenced planting; has less than 100 acres in cane; in No. 2 nothing done.)

No. 3. At Lihue, utilizing all the water remaining of the Huleia River, say 500 acres. Cost of irrigation works not over \$10,000. Adjoining the Waialua River, say 1,000 acres. Cost of irrigation works not more than \$10,000.

No. 4. Near Anahola, say 500 acres; water from Kealia River. Cost of irrigation works, say \$10,000.

No. 5. At Koolan, excellent soil, say, 1,000 acres. Water from Stony Brook and reservoir. Cost of irrigation works, \$25,000.

#### RECAPITULATION.

Number.	Area.	Cost of irrigation works.
No. 1.....	<i>Acres.</i>	
No. 2.....	3,000	\$125,000
No. 3.....	3,000	125,000
No. 4.....	1,500	20,000
No. 5.....	500	10,000
No. 5.....	1,000	25,000
	9,000	305,000

Though not so requested by you, I will carry these estimates a little further. If not useful, they will hardly do harm.

On the assumption that one-half of this area could be cultivated at the same time—4,500 acres, being one-half, should yield, at the lowest calculation, 3 tons per acre = 13,500 tons, at \$130 per ton..... \$1,750,000

Cost of the 5 mills requisite to manufacture above amount of sugar, not over.....	\$350,000
Cost of animals, carts, agricultural implements, &c., say.....	60,000
Cost of seed, cultivation, cutting, and hauling, say \$80 per acre first crop (includes all labor on land).....	360,000
Cost of manufacturing sugar not over one-eighth of gross proceeds.....	218,750

	988,750
Add cost of irrigation work.....	305,000
	1,293,750

Balance of above.....	456,250
-----------------------	---------

Deduct commissions, incidentals, interest, &c.

Consider that the expense of cultivating second and third years will be much less; that irrigation works, mills, implements, teams, &c., are paid for, and only ordinary wear and tear and interest are to be charged. But I will not weary you with further details. I regard the above estimates as tolerably approximate, but not, of course, exact. Much of the land above mentioned should produce nearer 5 tons than 3 per acre. It will require good management to bring the expense of cultivating one acre as above within \$80. It will vary from \$70 to \$100. The cost of manufacturing, I feel confident, will not exceed the sum named. However, I do not wish to pin my reputation upon anything herein contained, though I have endeavored to give sober and unexaggerated statements.

I am, very respectfully, yours,

JACOB HARDY.

J. M. MORTON, Esq.,  
United States Consul, Honolulu, &c.

On this (Oahu) island all the plantations require irrigation, and for this object about all the available water has been brought into requisition.

Regarding the conditions on the island of Molokai, where there are as yet but three plantations, I quote as follows from a letter addressed to

me by Mr. R. W. Meyer, a gentleman of intelligence, and of long experience in the country :

On the west end of this island there are indeed very extensive areas of land, certainly thousands of acres, of the most fertile virgin soil, and most excellently adapted for the cultivation of sugar cane, provided a sufficient supply of moisture could be secured to keep it growing through the dry seasons of the year.

The prospect of obtaining a sufficient supply of water is, I regret to say, not promising, on account of the absence of streams on the island. A sufficient supply may perhaps be secured by constructing extensive reservoirs for receiving and storing up the water of streams which run after heavy rains for a longer or shorter time, generally short, and chiefly during the rainy season. The eastern end of the island is better watered; there is also an elevated tract of land of limited extent, where cane would grow, if irrigated, and there a supply of water may be obtained.

As a sugar-producing country Hawaii must take the first rank among the islands. It will be observed that more than half of the total average under cultivation in the kingdom is found on this island. An abundance of rain throughout the sugar districts generally renders irrigation unnecessary.

The most favored locality is found on the northeast coast of the island comprising what are known as the Hilo, Hamakua, and Kohala districts. These are distinguished for the depth and richness of their soil, while they face the daily showers brought in by the northeast trades, and receive therefrom the constant moisture which is so essential to the productiveness of this volcanic soil. Of these the Hamakua district is comparatively a new one as a cane-growing country, as most of the plantations here have been established since 1875. There is yet a large amount of land in Hamakua excellently conditioned for the culture of sugar cane, but it would seem that before any considerable portion of such land may be made of practical avail formidable obstacles must be overcome in connection with the absence of harbors or favorable shipping points. The sea margin of Hamakua, about 35 miles in extent, is characterized by precipitous bluffs, often reaching an elevation of several hundred feet, while the face of the country near the sea is marked by numerous and deep gulches or ravines, which now render transportation for any great distance along its shores impracticable.

With a view of obviating these difficulties various means have been brought into requisition, among which I may mention the building of large cranes on the summit of the bluffs, the sugar packages being thereby handed down into covered boats which are then pulled through the surf to the vessel waiting outside.

In one instance a wire cable has been stretched from a high bluff toward the sea and anchored about 1,500 feet from the shore. Boats from the vessels are drawn up the cable by steam power, and I am informed that in this manner cargoes are being successfully shipped and discharged. How far it may be found profitable to use for this purpose such appliances as I have mentioned remains to be demonstrated. The introduction of the wire cable, it is believed by many, will open a way for the utilization of much of the rich land now lying idle in this district.

Undoubtedly the most effectual method of meeting the difficulties which I have referred to would be by the construction of railroads. It may be said that attention has been directed to this subject for some time, and several roads have been projected and considerable preliminary work in the way of surveying, &c., has been done. From Kanaihae across Kohala and the northern part of Hamakua district to Kohalalele, a distance of more than 30 miles, the route of a road has been surveyed, whose probable cost, it is estimated, will be about \$500,000.



From Hilo to Kohalalele, connecting with the road first mentioned, a distance of about 70 miles, another road has been partially surveyed at the instance of the government, the cost of which, and its equipment, is estimated at \$30,000 per mile.

In 1878 the legislature of the kingdom passed an act to promote the construction of railways, which guarantees "to any corporation that shall undertake any such railroad or railroads a profit not less than 5 per cent. per annum on the cost of their road or roads, and equipment thereof." I cannot learn, however, that this or the other generous provision of the act referred to has as yet contributed materially toward securing any large amount of capital for the purpose, and I think it safe to assert that the early completion of a railroad on the island of Hawaii is extremely problematical.

It may be said that a large increase of capital in the country is the essential element which must operate in the further material or rapid development of the sugar industry on the Hawaiian Islands. I may state further that the want of capital is already keenly felt, for most of the plantations are to-day laboring under heavy debts upon which they are paying high rates of interest.

The disadvantages of carrying on a business of any kind on borrowed capital are obvious; they are particularly apparent in the general management of the sugar business on the Hawaiian Islands to-day, as witnessed so prominently in the fact that a large portion of the sugar manufactured on the islands which might be shipped direct to San Francisco from the point where it is produced at, say, a cost of from \$3 to \$4 per ton, is now shipped first to Honolulu at a cost of from \$4 to \$5 per ton, and thence, after expenses of storage, &c., have accrued to the planter, is shipped to San Francisco at an additional expense of \$3 to \$4 per ton; all this at the instance of the agent of the plantation in this city who has advanced it money, and is thus enabled to secure a handsome commission for the handling of the goods at this place.

As yet the only enterprise of great importance which has received direct financial aid from abroad is that of the Hawaiian Commercial Company on Maui, already referred to, the chief promoter of which has been Mr. Claus Spreckels, of San Francisco, who, being largely interested in sugar refineries in that city, has naturally had his attention directed toward investments on these islands. Other opportunities for similar ventures are not wanting now in the country, but it may reasonably be supposed that capitalists, before investing largely in railroads or other expensive preparations looking to the establishment of large sugar plantations, will first be disposed to take seriously into consideration the existing uncertainty as to the probable duration of the reciprocity treaty which has served to lend so great an impetus to the sugar industry of this country.

In view of all the conditions, then, of which mention has been made, I may state that while there is yet a large amount of virgin land in the country which may be made available for the culture of sugar-cane, there is every probability that the further material development of this industry will be slower and more gradual than has been characteristic of it during the past few years.

Before leaving this subject I desire to present in full the following letter of Hon. H. M. Whitney, a prominent citizen and an old resident of these islands, touching several interesting points in connection with this industry. I may state that the "Lahaina cane" referred to by

Mr. Whitney is fast coming into general use among the planters, and to the exclusion of nearly all other kinds of cane:

KEAIIWA KAU, HAWAII, September 15, 1879.

DEAR SIR: I beg to acknowledge receipt of your printed circular of September 1, submitting certain questions relating to the cultivation of cane and manufacture of sugar in the Hawaiian Islands.

I have appended answers to such as I am able to reply to, with the exception of several which I take the liberty to reply to more fully herewith:

*Query 15.* It may interest you to know something of the history of what is now known here as the "Lahaina cane," which more properly should have been named "Tahitian cane." It was brought here in an American whale-ship from Tahiti in 1860. The ship anchored at Lahaina, and Consul Chase on visiting the vessel observed some stalks of sugar-cane hanging in the cabin, and solicited one or two, which the captain gave to him. The remainder of the stalks were given by the captain to a Mr. Oudinot, residing also at Lahaina. Both parties planted the stalks, which had been found, on eating, to be very rich and sweet.

The young cane grew very rapidly and thrifty, attracting general attention from its novel appearance and rapid growth. Such was the eagerness of natives to procure it that they paid ten cents a stalk to obtain it for planting, and gave it the name of *Ko Kenu Kenu*, "or ten-cent cane." It differs from all other canes here, the leaves having a light green shade, narrow and long, while the stalk often reaches 15 to 16 feet in length. Its skin or husk, when ripe, is of a bright golden yellow, the meat white, and the juice remarkably saccharine, standing from 9° to 11° Baumé, the variation in density arising from the wetness or dryness of the locality where grown. In Tahiti, which has a wet climate, its richness in sugar was probably not observed. The change to our drier climate has probably improved the cane, and made it a favorite in every part of this group. It has turned out in small favored spots seven tons of sugar per acre, where other canes could not have produced half that quantity. Full grown stalks of 10 to 15 feet in length will yield from one to one and a half pounds of sugar.

So far as is known it has not deteriorated in size or richness of juice, when grown eight or ten years on the same land. It is seldom allowed to ratoon more than twice.

Nearly all the sugar now made in this group is from Lahaina cane, which has increased the product fully 25 per cent. more than the old varieties of cane could yield.

*Query 30.* Only those who own the mill and cultivate their own cane can tell what is the exact cost of producing the sugar, and then only after the establishment has been at work several years, as the cost of the first two or three crops is much greater than for subsequent crops, which are generally larger, thus reducing the cost very much. A plantation making 1,000 tons of sugar can produce the sugar at a much less cost per ton when it makes only 250 tons.

*Query 44.*—Regarding the *best labor*, it should be added, that native Hawaiians are unquestionably the most efficient laborers on plantations, especially where they have had several years' experience. But the number of able bodied Hawaiians suitable for this service is quite limited—probably not over three or four thousand at the most. And all of them are more or less independent, *i. e.* want to be off from plantation work when they choose. They are not steady and reliable help. The Chinese, on the contrary, are, and as they are quick to learn, soon become reliable plantation laborers, serving as field hands, plowmen, &c. When well fed and well treated, they are generally steady and faithful. They seldom lose over one day a month from sickness or other cause, while natives are off work a quarter of the time. The terms of the contract are liberal, and no laborer who is faithfully disposed ever has cause to complain.

Regarding land in Hamakua suited to cane culture, it gives me pleasure to make the following statement, even should my estimate not prove ultimately correct. I have heard statements, however, so exaggerated that they ought to be corrected through some more official, if not more reliable, source than a private correspondent, however cautious he may be in his statements. I have been through the districts of Hilo and Hamakua several times, my last trip having been made the present year with this same inquiry in view, and I will give you the result of my investigations. I include Hilo, as it forms a part of the sugar-belt of Hawaii.

From the village of Hilo to Laupahoehoe Gulch is a ride of about 30 miles; and from Laupahoehoe to Waipio Gulch, near the north boundary of the Hamakua district, is also about 30 miles. The public road through these districts is perhaps a mile from the sea-shore, and through Hamakua, at an elevation of 1,000 feet above the sea, the land above the road rapidly rising into elevated wet and cold forest sections. The belt of cane land between Hilo and Waipio may be safely estimated at two miles in width, the public road generally marking its central line. Below the belt the soil is either too dry or so near the sea that the cane is injuriously affected by the salt ocean spray, while above this belt the climate is too wet and cold for cane to flourish. The

limit at which cane will grow in Hamakua may be set down at 1,500 feet elevation above the sea, and varying from 2 to 3 miles distant from it. Here, then, we have an area within this belt of 120 square miles, at least one-third of which consists of stony land, ravines, &c., unsuited to cane culture. The remainder, 80 square miles or 51,200 acres, I consider a fair estimate of the cane-lands in these two districts. In them are now located sixteen sugar estates (not all in operation yet), covering an average of 1,500 acres each of this estimated cane-land, in all 24,000 acres, or nearly half of the whole area of the sugar belt. This acreage by no means includes all the lands of these sugar estates, for some of them extend from the sea-shore to the mountain summits. These 24,000 acres are, of course, not all planted with cane. Probably one-quarter or one-third may be, while the rest lies fallow or is used for pasturage.

This estimate will allow the number of plantations in Hilo and Hamakua districts to double the present number at some future day; but until a railroad shall be constructed through the districts, or some good landings are provided, the increase cannot be looked for.

Very truly, yours,

H. M. WHITNEY.

J. M. MORTON,  
*United States Consul, Honolulu.*

### THE RICE PRODUCT.

The production of rice has been somewhat greater than during the year 1878. It will be observed, however, that although there have been exported 1,014,090 pounds more than during 1878, there have been less paddy exported by 3,258,583 pounds, equivalent to about 2,281,009 pounds of rice, which shows an actual diminution in the exportation of rice since 1878 of 1,266,918 pounds.

This fact is accounted for in the greatly increasing consumption of this staple by the Chinese laborers of the country. It may be said that the culture of rice on the island is confined to the Chinese, and is generally carried on under some co-operative system, whereby each laborer has a direct pecuniary interest in the proceeds arising from the sale of the crop. I have been desirous of presenting some approximate estimate of the total acreage of rice lands now under cultivation in the kingdom, but have found it impracticable to obtain reliable data for this purpose.

Nearly all the rice produced in the country is grown on Oahu and Kauai Islands. The lands are for the most part leased either from government or from private parties by the Chinamen who can afford to pay annually for their use from \$10 to \$30 per acre. Two crops of this staple are yearly produced, and an average annual yield is about 3,000 pounds to the acre. Much of the land used for this purpose has been converted from ground formerly cultivated in taro by the native people of the country, while all other lands which could be made available have been eagerly sought after and rapidly brought into requisition.

It may be stated that the successful culture of rice requires a flat country, which presents advantages for draining, and where facilities for constant irrigation are afforded; and I may say that as these favorable conditions are not found to apply extensively to any one locality, the fields are generally small and widely separated.

It is now asserted by the most intelligent among the Chinese who are engaged in this business that almost all the land on the islands available for the culture of rice has already been brought into use. There is, however, undoubtedly, much land now planted in sugar cane (and certain lands in the island of Kauai are especially mentioned in this connection) which might be made to yield good rice crops, and which it may prove profitable hereafter to cultivate for that purpose.

During the past year several hundred additional acres have been brought under cultivation, which must considerably augment the an-

nual yield for 1880. It may be said, however, that the exportations of that year will probably show a falling off from the present year, as the home consumption of this product is still increasing, owing to a rapid immigration of Chinese to serve as laborers on the sugar plantations. In this connection I may say that foreign rices for the consumption of the Chinese have been imported into the kingdom as follows, since the 1st of January:

	Pounds.
Chinese rice.....	430, 627
Japan rice.....	287, 000
British Indies.....	112, 000
Total.....	829, 627

It may be stated that China rice costs, delivered in Honolulu, about  $4\frac{1}{2}$  cents per pound, which includes the payment of Hawaiian duty of  $1\frac{1}{2}$  cents per pound. Japan and British India rice may be delivered here for about  $3\frac{1}{2}$  cents, which includes the payment of an ad valorem duty of 10 per centum. As Hawaiian rice is worth in Honolulu from  $5\frac{1}{2}$  to 6 cents per pound, it will be seen that the plantations would realize a material saving by importing foreign rices for the consumption of their laborers. That a larger amount than 829,627 pounds has not been imported during the year is owing to the fact, as I am informed by the Chinese merchants here, that this climate is unfavorable to the preservation of the foreign rices, and further, that the Chinese laborers, after becoming accustomed to its use, greatly prefer the native product as an article of food.

#### OTHER PRODUCTS.

The impetus given to the culture of sugar and rice under the operations of the reciprocity treaty has not extended to other products. Of the chief domestic exports it will be seen that all have fallen off, with the exceptions above noted and that of bananas. Of the fruits which are indigenous to this country and which grow abundantly may be mentioned the yam, bread fruit, cocoanut, sugar cane, arrowroot, raspberry, strawberry, banana, ohelo-ohia (a juicy apple of inferior flavor) and the sweet potato. Many kinds of esculent fruits and vegetables have been introduced with success, among which are peaches, citrons, limes, guavas, pineapples, oranges, grapes, melons, the chirimoya, tamarinds, alligator pears, mangoes, and figs. Coffee, tobacco, cotton, indigo, mulberry, and cocoa have been successfully cultivated. The low lands of the islands are suited to the culture of most of the tropical plants. Ramee flax-seed and other fibrous plants only require skillful cultivation to produce abundantly. The castor-bean grows profusely and spontaneously. Wheat and oats thrive at an elevation of 1,000 feet and upwards.

Previous to the time when California became conspicuous as a grain-producing country wheat was extensively grown, and all the flour consumed in the country was manufactured at home. Fine Irish potatoes are grown on the uplands of Maui and the other islands.

The chief food of the country is taro (*Arum esculentum*). It has been estimated that the produce of one acre of this nutritious plant will support twenty people for one year.

#### COFFEE.

The coffee grown on these islands is of excellent quality and commands a high price in the markets. The cultivation of this staple

has at various times been seriously interfered with by the blight which, taken together with the scarcity of labor, will account for the decrease in its production. The whole product of the islands is now consumed at home. With cheaper labor and more intelligent cultivation this might undoubtedly be made one of the important industries of the country.

Table No. 8 shows the whole amount of coffee exported from the first year of its exportation.

#### LABOR AND IMMIGRATION.

Labor was a vexed question on the Hawaiian Islands as far back as 1852. During that year coolie labor was imported from China to work on the sugar plantations under contract for five years. By 1872 this matter had attracted the attention of the government and people generally, which led in that year to the establishment of the Hawaiian Immigration Society. In an interesting report made to that society in 1874 by its secretary, I find that there were then 3,786 laborers on the sugar plantations, of which about 3,100 were natives, including nearly 400 females, and the balance of Chinese and other races.

The board reported that the plantations were at the same time in need of more than one thousand additional laborers.

During the biennial period ending March 31, 1876, \$10,000 were expended by the government for the introduction of Chinese laborers. In 1876, \$22,000 were appropriated for the same purpose and \$35,000 for the "encouragement of immigration." During the two years following the whole number of immigrants arriving in the country was as follows: Chinese, 3,222; other nationalities, 315; total, 3,537.

The average wages paid to these laborers were from \$12 to \$15 per month and found, being an advance of from \$6 to \$8 over the wages current in 1875.

In 1878 the Hawaiian assembly again appropriated for the encouragement of immigration \$50,000. Under this appropriation the board has since sent two vessels to the South Sea Islands after immigrants, and three other vessels have been dispatched under its direction in the same direction by private parties.

It has also employed certain vessels coming from Madeira for the importation of Portuguese. In the above manner have been brought into the country during the years 1878 and 1879 as follows:

Adults from South Sea Islands .....	344
Adults from Madeira Islands .....	319
Children from Madeira Islands .....	172
Total .....	835

The laws of this kingdom permit the "shipping" or binding of laborers by written contract for a term of years not exceeding five. When laborers willfully absent themselves from the plantations the laws also provide for their arrest and return to the place of their employment, and that they shall be compelled to serve not to exceed double the time of their absence.

Most of the laborers of the sugar plantations enter under contract, as above described, for a period of from one to three years. The ruling wages for labor during the present year have been \$12 per month and found; but a reduction to \$10 per month has recently been made, one of the results of the large immigration of Chinese. The rapid decline of the native population of the country, besides rendering necessary a large

importation of foreign labor, has not failed to attract general attention and consideration on the part of all intelligent and thoughtful persons interested in the welfare and prosperity of this people. That the Hawaiian stock is surely wearing out from long ages of interbreeding, assisted probably in no inconsiderable degree by the ravages of a destructive malady, whose seeds were originally acquired through contact with the white race, is a fact generally recognized. It is equally apparent that this decay can only be arrested and the stock recruited and strengthened by an infusion of new blood. I may say that the best means of accomplishing such end continues to excite earnest discussion here. I have already shown what steps have been taken by the government looking to the introduction of families of such cognate races as those of the South Sea Islanders. I may state further that in 1878, Hon. H. A. P. Carter, Hawaiian minister plenipotentiary to London, was instructed to examine into the feasibility of an East Indian immigration, as it was believed that those people were adapted to the wants of the country and would readily amalgamate with the native race. The subsequent report of Mr. Carter showed that owing to the famine then prevailing in India, the time was unfavorable for the purpose.

An effort looking to the same object has since been made on the part of a number of citizens in the form of a petition to the king and cabinet praying "that such steps may be taken as are necessary to securing the introduction of people from British East India."

It may reasonably be doubted, however, if any further action will be taken by the government in this direction as there must be a disposition on its part to seriously question the wisdom of bringing into the country a class of laborers over whom the English authorities, in accordance with an established national policy, would insist in maintaining judicial jurisdiction. In the mean time the immigration of Chinese steadily increases. This is undoubtedly the most desirable class of labor for the planters which has been brought into the country. But the Chinese are not always content to serve as laborers on the sugar and rice plantations. Many branch out into other occupations, and to-day the mercantile business of the country is largely in the hands of this people; besides, as I have already shown, the culture of rice is almost entirely carried on by them—while they are slowly but surely acquiring proprietary interests in the sugar plantations.

The arrival of the Chinese steamer *Ho-Chung*, on the 14th instant, is the inception of an effort on the part of the Chinese Steam Navigation Company to establish commercial relations with this country.

With the *Ho-Chung* comes Mr. Celso Caesar Moreno, who, in a published card, states that he is the authorized agent of the company to open negotiations with the Hawaiian Government, with a view to the establishment of regular steam communication between Canton and Honolulu. The result of Mr. Moreno's efforts in this direction will be looked for with some interest by the citizens of these islands, for Hawaii as well as our own country has now a "Chinese question" which is already beginning to excite earnest discussion.

The following table shows the total number of Chinese immigrants now in the country:

On December 27, 1878, shown by census:

Chinese males .....	5,685
Chinese females .....	231
Total .....	5,916

Arriving this year up to the present date :

Males.....	3,685
Females .....	52
	<u>3,737</u>
Departed since January 1, 1879 .....	9,653
	<u>203</u>
Total Chinese population.....	9,450

#### EDUCATION.

The islands possess an efficient school system, carried on under the management of a board of education whose members are appointed by the king.

The revenue for the support of the public schools is obtained from direct appropriations by the legislature, from an annual tax of \$2 levied on each male inhabitant of the kingdom between twenty-one and sixty years of age, from the interest on a school fund, and from the sale of school lands.

During the fiscal period of two years, ending March 31, 1878, there were expended for purposes of education nearly \$73,000, derived in the above manner. All children on the islands between the ages of six and sixteen years, are required by law to attend school. The most advanced institution of learning is Oahu College, near this city. Its curriculum embraces studies which are adapted for preparing the graduates of the institution for entry into Yale, Harvard, and other colleges of like character in the United States.

The following table shows the number of schools and students in the kingdom at the beginning of the present year :

Name of schools.	Number of schools.	Number of boys.	Number of girls.	Total.
Government common schools .....	169	2,480	1,833	4,313
Government select schools .....	11	684	259	943
Independent schools .....	42	827	908	1,735
Total .....	222	3,991	3,000	6,991

#### CENSUS.

I present the following summary of the census of the Hawaiian Islands, taken December 27, 1878, under the direction of the board of education :

Natives .....	41,098
Half-castes .....	3,420
Chinese .....	5,916
Americans .....	1,276
Hawaiians born of foreign parents .....	947
Britons .....	883
Portuguese .....	436
Germans .....	272
French .....	51
Other foreigners .....	666
Total population December 27, 1878 .....	57,985
Total population December 27, 1872 .....	56,897
Increase since 1872 .....	1,088

## Number of natives and half-castes:

In 1872.....	51,531
In 1878 .....	47,508
Decrease since 1872.....	4,023
Number of foreigners in 1878 .....	10,477
Number of foreigners in 1872.....	5,366
Increase since 1872 .....	5,111
Increase of foreigners since 1872 .....	5,111
Decrease of natives since 1872.....	4,023
Total increase of population since 1872.....	1,088
Number of Chinese in 1878.....	5,916
Number of Chinese in 1872.....	1,938
Increase of Chinese since 1872.....	3,978
Number of half-castes in 1878 .....	3,420
Number of half-castes in 1872 .....	2,487
Increase of half-castes since 1872.....	933

The percentage of decrease of the whole population has been as follows:

	Per cent.
1850 to 1853, three years.....	13.10
1853 to 1860, seven years .....	4.70
1860 to 1866, six years .....	9.67
1866 to 1872, six years.....	9.62

The percentage of decrease of the native population, including half-castes, has been as follows:

	Per cent.
1860 to 1866, six years.....	12.27
1866 to 1872, six years .....	12.31
1872 to 1878, six years .....	7.80

The percentage of children under 15 years of age to the whole population was, in 1866, 26.50 per cent.; in 1872, 27.77 per cent.; in 1878, 28.06 per cent.

The percentage of children under six years of age to the whole population was, in 1872, 12.08 per cent.; in 1878, 13.13 per cent.

Number of children under six years of age in 1878, 7,608; in 1872, 6,869; excess in favor of 1878, 739.

The percentage of children under fifteen years of age to the number of females was, in 1866, 58.39 per cent.; in 1872, 62.59 per cent.; in 1878, 68.11 per cent.

The percentage of children under six years of age to the number of females was, in 1872, 27.21 per cent.; in 1878, 31.86 per cent.

Of the 2,581 inhabitants reported for the island of Molokai, 806 were lepers at the leper settlement at Kalawao.

## REVENUES.

The revenue of the country is derived from the following sources: Foreign imports, fines and penalties, internal commerce, internal taxes, fees and perquisites, government realizations, and government bonds.

There was received from all these sources during the fiscal period of two years ending March 31, 1878, \$1,151,713.45.

The receipts of the present fiscal period, which will end March 31, 1880, will be considerably in excess of the above amount.



## EXPENDITURES.

In 1878 the legislature appropriated for the use of the government during the present fiscal period of two years, which will close as above stated, as follows:

Civil list .....	\$65,500 00
Permanent settlements .....	15,075 00
Legislature and privy council .....	16,800 00
Judiciary department .....	84,617 50
Department of war .....	68,000 00
Department of foreign affairs .....	37,600 00
Department of interior .....	646,846 15
Department of finance .....	276,530 00
Department of attorney-general .....	129,508 00
Bureau of public instruction .....	88,286 00
Miscellaneous expenditures .....	12,936 91

1,441,699 56

## VALUE OF REAL ESTATE AND PERSONAL PROPERTY.

The following comparative table shows the assessed value of real and personal property in the city of Honolulu and the principal sugar districts of the country for the years 1875 and 1879:

## ISLAND OF OAHU.

Sugar districts.	Assessed value in 1875.	Assessed value in 1879.
Honolulu:		
Real property .....	\$2,579,637	\$3,578,400
Personal property .....	8,263,862	7,185,324
Total .....	5,583,499	10,763,924

## ISLAND OF MAUI.

Lahaina:		
Real property .....	369,345	350,577
Personal property .....	90,205	303,325
Wailuku:		
Real property .....	489,728	888,000
Personal property .....	343,122	608,257
Makawao:		
Real property .....	264,735	1,063,536
Personal property .....	224,175	450,612
Total .....	1,781,300	3,756,667

## ISLAND OF HAWAII.

Hilo:		
Real property .....	368,425	584,545
Personal property .....	247,815	450,108
Kau:		
Real property .....	103,063	248,864
Personal property .....	119,961	512,217
North Kohala:		
Real property .....	273,107	894,690
Personal property .....	150,493	390,285
Hamakua:		
Real property .....	335,980	380,638
Personal property .....	198,200	242,475
Total .....	1,797,044	3,715,022

## ISLAND OF KAUAI.

Sugar districts.	Assessed value in 1875.	Assessed value in 1879.
<b>Hanalei:</b>		
Real property.....	\$71, 410	\$185, 950
Personal property .....	82, 800	107, 395
<b>Kawaihau:</b>		
Real property.....	51, 752	195, 109
Personal property .....	18, 350	244, 766
<b>Lihue:</b>		
Real property.....	106, 200	324, 300
Personal property .....	98, 000	274, 800
<b>Koloa:</b>		
Real property.....	92, 670	145, 190
Personal property .....	79, 835	195, 780
<b>Total .....</b>	<b>550, 517</b>	<b>1, 658, 290</b>

The total value of real and personal property in the kingdom the present year, 1879, upon which a tax is levied by the government of three-fourths of one per cent., is as follows:

Real property .....	\$10, 699, 607
Personal property.....	12, 022, 449
<b>Total .....</b>	<b>22, 722, 056</b>

These figures show an increase of values since 1875 of \$12,856,889. The term personal property includes growing crops, machinery, all moneys on hand and moneys loaned, all mortgages, public stocks, and stocks in corporations.

## PUBLIC FUNDED DEBT.

The funded debt of the kingdom on the 1st day of November was as follows:

Drawing 12 per cent. interest.....	\$44, 800
Drawing 7 per cent. interest.....	51, 000
Drawing 9 per cent. interest.....	306, 600
<b>Total .....</b>	<b>402, 200</b>

JOHN M. MORTON.

UNITED STATES CONSULATE,  
*Honolulu, November 25, 1879.*

## HAWAIIAN TRADE DURING 1879.\*

## No. 1.—Imports Honolulu, Hawaiian Islands.

Articles.	Value of goods paying duty.	Value of goods free, by treaty.	Value of goods in bond.	Total.
Ale, porter, beer, and cider .....	\$31,912 83		\$11,342 81	\$43,255 64
Animals and birds .....	52 75	\$78,518 96		78,571 71
Building materials .....	38,711 33	49,890 26	910 53	89,512 12
Clothing, hats, boots .....	189,677 94	55,596 00	6,810 93	251,584 86
Crockery, glassware, lamps, and lamp fixtures .....	29,435 09	970 57	701 16	31,107 42
Drugs, surgical instruments, and dental materials .....	29,543 60		216 09	29,759 69
Dry goods:				
Cottons .....	98,690 23	78,552 74	2,694 46	179,937 43
Linen .....	13,042 32		6 30	13,048 62
Silks .....	32,956 26		808 00	33,764 26
Woolens .....	69,783 64	11,785 94	663 88	82,213 46
Mixtures .....	32,837 19	4,895 78		37,732 97
Fancy goods, millinery, &c. ....	66,046 88	1,858 62	538 61	68,444 11
Fish, dry and salt .....	14,144 70	52,300 71	532 92	66,978 33
Flour .....	647 25	80,845 38	327 75	81,820 38
Fruits, fresh .....	219 30	4,762 70		4,982 00
Furniture .....	29,763 26	32,387 19	3,006 50	65,156 95
Furs and ivory .....		3,223 80		3,223 80
Grain and feed .....	1,890 91	53,403 20	107 99	55,402 10
Groceries and provisions .....	106,015 70	217,772 12	10,622 17	334,409 99
Guns and gun materials .....	5,540 62	1,906 16	4,978 98	12,425 76
Gunpowder .....	4,648 41		2 00	4,650 41
Hardware, agricultural implements, and tools .....	53,133 42	149,551 14	1,808 24	204,492 80
Iron and steel, &c. ....	26,497 79	33,471 12	1,741 07	61,709 98
Jewelry, plate, clocks .....	80,279 71	2,023 32	3,844 07	86,147 10
Leather .....	2,578 96	20,968 73		23,547 69
Lumber .....	6,688 95	183,198 84		189,887 79
Machinery .....	342,979 98	199,477 18	587 96	543,045 12
Matches .....	59 43	8,963 70	26 30	4,049 43
Musical instruments .....	10,009 60		23 57	10,033 17
Naval stores .....	14,618 76	29,602 02	3,189 47	47,410 25
Oils, coconut, kerosene, whale, &c .....	7,513 70	54,446 60	2,854 75	64,815 05
Paints and paint oils and turpentine .....	22,744 43	503 00	113 04	23,360 47
Perfumery and toilet articles .....	10,243 75	448 11	109 92	10,801 78
Saddlery, carriages and material .....	31,048 43	46,643 30	1,014 80	78,706 53
Shooks and containers .....	32,733 31	9,850 22	3,001 86	45,585 39
Spirits .....	8,019 01		69,500 77	72,519 78
Stationery and books .....	10,249 94	32,777 66	1,071 01	44,098 61
Tea .....	11,980 73		8,818 80	20,799 53
Tin and tinware and materials .....	6,566 90			6,566 90
Tobacco, cigars, &c. ....	3,610 82	49,249 62	29,758 54	82,618 96
Whalebone .....		19,363 45		19,363 45
Whaling gear .....	258 71		731 50	990 21
Wines, light .....	2,595 88		6,582 29	9,178 17
Sundry merchandise not included in above .....	59,955 66	32,232 81	4,191 55	96,380 02
Sundry unspecified merchandise .....	2,148 84			2,148 84
Charges on invoices .....	49,621 98	29,862 54	4,798 47	84,282 99
Twenty-five per cent. added on uncertified invoices .....	4,576 43			4,576 43
<b>Total .....</b>	<b>1,591,270 93</b>	<b>1,626,142 49</b>	<b>187,529 05</b>	<b>3,404,942 47</b>
Discount .....			23,345 47	
Damaged and short .....			4,113 19	
				27,458 66
<b>IMPORTS AT OTHER PORTS, HAWAIIAN ISLANDS.</b>				<b>3,377,483 81</b>
Kahului .....	7,377 84	110,252 54	34 66	
Hilo .....	4,639 73	93,407 52		
Kealahou .....		142 88		
				215,855 17
Value of free goods .....				3,593,338 96
Grand total .....				149,639 41
				3,742,978 39

\* From the report of the collector-general of customs at Honolulu for the year 1879.

No. 2.—*Value of goods paying duty.*

## Imported at Honolulu from—

United States, Pacific ports .....	\$361, 919 49
United States, Atlantic ports .....	33, 670 59
Great Britain .....	798, 261 17
Germany .....	185, 867 69
China .....	86, 443 43
Australia and New Zealand .....	65, 922 73
France .....	26, 256 94
British Columbia .....	11, 102 20
Micronesia, Guano Islands, &c .....	2, 993 43
Society Islands .....	869 56
Sea, by whalers .....	508 87

Total Honolulu .....	1, 573, 816 10
At Kahului, from United States, Pacific ports .....	7, 377 84
At Hilo, from United States, Pacific ports .....	4, 639 73

Total at all ports .....	1, 585, 833 67
--------------------------	----------------

*Value of goods and spirits bonded.*

## From—

United States, Pacific ports .....	\$69, 851 50
United States, Atlantic ports .....	8, 320 52
Great Britain .....	43, 683 98
China .....	39, 459 97
Australia and New Zealand .....	11, 428 31
France .....	7, 597 11
Germany .....	4, 876 06
Sea, by whalers .....	1, 122 04
Micronesia, Guano Islands, &c .....	775 83

Total Honolulu .....	187, 115 32
At Kahului .....	34 66

Total at all ports .....	187, 149 98
--------------------------	-------------

*Value of goods free from the United States, free by treaty.*

United States, Pacific ports .....	\$1, 317, 824 62
United States, Atlantic ports .....	298, 727 77
At Kahului .....	110, 252 54
At Hilo .....	93, 407 52
At Kealahakua .....	142 88
Total .....	1, 820, 355 33

*Value of goods imported free.*

Animals and birds .....	\$130 00
Bags and containers (returned) .....	442 32
Books, printed in Hawaiian .....	1, 272 10
Coal, at Honolulu .....	37, 791 77
Diplomatic representatives .....	812 86
Foreign navies .....	1, 558 40
By traders .....	5, 494 49
His Majesty .....	8, 467 75
Hawaiian Government .....	56, 036 42
Personal and household effects (old and in use) .....	16, 227 50
Iron, plate and pig .....	17, 159 74
Plants and seeds .....	30 00
Returned cargo .....	2, 038 50
Specie .....	\$160,500 00
Sheathing metal .....	1, 689 61
Sundries, by permission .....	487 95

Total .....	149, 639 41
-------------	-------------

*Résumé, imports Hawaiian Islands.*

Value goods free by treaty.....	\$1,820,355 33
Value goods paying duty.....	1,585,833 67
Value goods and spirits bonded.....	187,149 98
Value goods and spirits free.....	149,639 41
<b>Total .....</b>	<b>3,742,978 39</b>

*No. 3.—Domestic exports, Hawaiian Islands.*

Sugar.....	pounds..	49,020,972
Molasses.....	gallons..	87,475
Paddy.....	pounds..	38,815
Rice.....	do.....	4,792,813
Coffee.....	do.....	74,275
Salt.....	tons.....	50
Poi.....	barrels..	167
Fungus.....	pounds..	2,571
Bananas.....	bunches..	12,369
Whalebone.....	pounds..	816
Goat-skins.....	number..	24,940
Hides.....	do.....	24,885
Calf-skins.....	do.....	168
Pulu.....	pounds..	137,001
Wool.....	do.....	464,308
Rum.....	gallons..	2,184
Cattle.....	head.....	50
Betel leaves.....	boxes..	62
Peanuts.....	pounds..	27,525

*Total value domestic produce exported.*

Total value domestic produce exported.....	\$3,587,503 76
Furnished as supplies to merchantmen, as per estimate.....	55,000 00
Furnished as supplies to national vessels, as per estimate.....	20,000 00
Furnished as supplies at all other ports, as per estimate.....	3,000 00
<b>Total .....</b>	<b>3,665,503 76</b>

*Total of all exports, Hawaiian Islands.*

Value foreign goods exported.....	\$116,214 21
Value domestic goods exported.....	3,587,503 76
Value domestic goods furnished as supplies (estimated).....	78,000 00
<b>Total .....</b>	<b>3,781,717 97</b>

*No. 4.—Table of principal domestic exports, Hawaiian Islands, showing the country to which exported.*

Articles.	Pacific ports of the United States.	British Columbia.	Australia and New Zealand.	Guano Islands.	China.	Germany.	All other ports.	Total.
Sugar.....pounds..	49,016,276		100	1,300	384	600	2,312	49,020,972
Molasses.....gallons..	81,325	4,976		882			292	87,475
Paddy.....pounds..	38,815							38,815
Rice.....do.....	4,769,589		13,206	2,390	4,000	260	3,533	4,792,813
Coffee.....do.....	68,134			200	3,672	2,058	211	74,275
Salt.....tons.....	50							50
Poi.....barrels..				139			28	167
Fungus.....pounds..	300				2,271			2,571
Bananas.....bunches..	12,369							12,369
Goat-skins.....pieces..	24,940							24,940
Calf-skins.....do.....						168		168
Pulu.....pounds..	25,447		111,554					137,001
Wool.....do.....	270,379					183,929		464,308
Hides.....pieces..	14,202					10,683		24,885
Cattle.....head.....							50	50
Betel leaves.....boxes..	62							62
Peanuts.....pounds..	27,525							27,525
Whalebone.....do.....	816							816
Rum.....gallons..							1,170	1,170

Statement showing the value of declared exports from the consular district of Honolulu, Hawaiian Islands, to the United States for the years ending September 30—

Articles.	1875.	1876.	1877.	1878.	1879.
Sugar and molasses .....	\$1,153,720 62	\$1,069,034 79	\$2,332,569 34	\$2,586,124 28	\$3,066,848 24
Molasses .....					10,776 24
Rice .....	53,644 44	85,219 73	137,126 39	165,613 33	239,170 96
Hides .....	55,930 00	22,699 99	20,355 53	75,974 03	15,963 04
Goat-skins .....	34,292 42	34,614 00	25,954 74	38,965 53	18,039 89
Pulu .....	20,781 85	10,018 54	2,222 23	3,295 45	2,561 89
Coffee .....	22,115 30	21,174 33	33,230 95	25,974 69	9,617 38
Paddy .....	8,337 36	10,092 10	21,779 44	85,776 95	33,323 07
Bananas .....	3,284 90	11,021 74	12,958 86	12,944 43	16,156 29
Wool .....	53,808 88	50,762 56	6,739 76	27,782 13	24,574 02
Fungus .....	4,643 43	1,043 03	1,762 26	937 12	
Household goods .....	805 00				
Whale oil .....	10,742 76	20,985 20		16,131 40	
Whalebone and ivory .....	25,073 85	28,522 92	21,145 42	63,680 47	30,342 14
Salt .....	477 50				425 00
Furs .....		11,117 96			
Peanuts .....		2,241 77	5,924 02	869 18	613 38
Tallow .....			2,543 27	7,468 92	
Cocoa-nut oil .....			4,437 60	1,185 96	694 07
Sperm-oil .....			6,115 61	7,384 36	
Opium .....				2,732 13	1,437 25
Kerosene .....					7,058 02
Miscellaneous .....	27,152 82	19,671 80	12,109 54	18,359 25	20,504 86
Total value .....	1,474,766 13	1,398,220 46	2,647,005 05	3,140,649 61	3,498,125 48
Increase .....			1,248,784 59	493,646 56	357,475 87
Decrease .....		76,535 67			

Years.	Imports.				
	From Germany.	From Australia and New Zealand.	From Great Britain.	From United States by treaty.	Total from United States.
1872.....	\$236,801 00	\$90,668 06	\$237,740 00		\$920,806 04
1873.....	190,136 37	70,280 64	89,512 83		795,446 94
1874.....	158,069 71	69,643 63	143,181 18		784,004 24
1875.....	189,038 66	78,652 26	246,922 50		964,940 53
1876.....	226,574 23	98,520 17	173,350 60	\$343,830 95	542,890 95
1877.....	209,149 34	101,638 41	341,706 15	1,100,642 52	1,775,427 50
1878.....	124,746 45	79,776 59	589,115 64	1,619,987 61	2,058,159 84
1879.....	198,224 75	107,351 04	900,945 15	1,820,355 33	2,309,080 43

Years.	Exports.		Customs.	Hawaiian registered vessels.	
	To United States.	Total to all countries.	Receipts, annual amount.	Number.	Tonnage.
1872.....	\$1,145,990 67	\$1,607,521 99	\$218,375 43	54	6,407 24
1873.....	1,086,581 34	1,128,054 66	198,655 76	58	8,561 10
1874.....	1,219,813 60	1,839,620 27	183,857 66	54	8,161 67
1875.....	1,547,778 79	2,089,736 00	213,447 21	51	7,375 94
1876.....	1,156,221 06	2,241,041 91	199,036 40	45	6,753 64
1877.....	2,308,773 23	2,676,202 98	230,498 71	54	8,994 57
1878.....	3,256,124 28	3,548,471 84	284,426 42	55	7,948 81
1879.....	3,658,784 64	3,781,717 97	359,671 05	63	10,022 94

Years.	Merchant vessels and steamers touching at Hawaiian Islands.				Passenger statistics.	
	Number of American.	Tonnage of American.	Total number.	Total tonnage.	Arrivals.	Departures.
1872.....	90	23,975	146	98,647	1,032	989
1873.....	76	51,826	109	62,767	733	775
1874.....	68	26,880	120	71,266	754	779
1875.....	74	41,350	132	93,110	850	654
1876.....	90	75,639	141	108,706	2,891	837
1877.....	117	81,417	181	120,907	2,020	802
1878.....	156	102,621	232	163,640	4,239	1,027
1879.....	177	99,102	251	151,576	7,763	1,418

## SOCIETY ISLANDS.

### TAHITI.

*Report, by Consul Atwater, on the trade and industries of Tahiti for the year 1879.*

Business has been unusually dull during the past year. The production of all kinds of produce requiring constant labor is neglected for the lack of laborers. The true Tahitian will not work any more than is sufficient to acquire the few necessities of life and to pay his road and head tax, and the introduction of other islanders is attended with so many obstacles and expenses, that it is seldom undertaken.

The culture of the vanilla plant, which started with such an impetus a few years ago, has subsided for the want of purchasers for the beans. Few understand how to prepare the bean for market, consequently it brings an inferior price.

The cocoa-nut tree is the most reliable investment. Eight years after the nut is planted a full-bearing tree will have grown up, netting, on an average, 30 cents per annum. The tree does not receive the slightest care, and always contains nuts in some stage of growth. An acre of ground will hold about 60 trees. It is estimated that there are 150,000 trees on Tahiti, the fruit of which is nearly all consumed as food on the island.

The export of oranges to San Francisco, which amounted formerly to 5,000,000 per annum, dropped to 1,500,000 this year. Most likely the export will cease altogether very soon, owing to the increasing production in Southern California.

Commerce between here and San Francisco is on the increase, and would be more so if our principal productions—cotton, copra, and pearl shell—were consumed in the States, and served as a medium of exchange. As it is, exchange is against us, and every vessel takes away our coin, which entails a heavy loss, as silver coins such as we send—five francs, peso, and sol pieces—are at a heavy discount in San Francisco.

The local government have offered a subsidy of \$30,000 per annum for two steamers of 450 tons each to make monthly trips between here and San Francisco, touching at the Marquesas on the voyage here; schedule time, twenty-two days. It is expected that steamers will commence running within the next eight months.

The duty on imports for 1880 is 12 per cent. ad valorem, and on alcohols 15 cents additional per liter. Twelve per cent. duty will be levied

on all moneys but those of France introduced into the colony after February 1, 1880. No changes have been made in the tariff for wharfage, pilotage, licenses, &c., from that of 1879.

Freight to and from San Francisco, \$8 per ton.

Exchange on San Francisco, 10 days' sight, 15 per cent. premium; on Liverpool, 90 days' sight, 10 per cent. premium.

DORENCE ATWATER.

UNITED STATES CONSULATE,

*Tahiti, December 31, 1879.*

*Statement showing the navigation at the port of Tahiti for the year ending December 31, 1879.*

Flag.	From—	ENTERED.					
		Steamers.		Sailing ves- sels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
British .....	Sydney, Auckland, and San Francisco.	2	358	13	1,603	15	1,961
French .....	France, New Caledonia, and San Francisco.	.....	.....	8	3,587	8	3,587
French (men-of-war) ...	New Caledonia and islands.....	7	.....	15	.....	22	.....
French protectorate ...	Marqueesas, Pomoto, and Leeward Islands.	26	1,300	88	4,270	114	5,570
Leeward Islands .....	Leeward Islands .....	.....	.....	31	1,898	31	1,898
German .....	Hamburg and Leeward Islands..	.....	.....	40	5,535	40	5,535
United States .....	San Francisco .....	.....	.....	25	4,221	25	4,221
Totals .....	.....	35	1,658	220	21,114	255	22,772

Flag.	To—	CLEARED.					
		Steamers.		Sailing ves- sels.		Total.	
		No.	Tons.	No.	Tons.	No.	Tons.
British .....	Sydney, Auckland, and San Francisco.	2	358	13	1,603	15	1,961
French .....	France, New Caledonia, and San Francisco.	.....	.....	9	2,612	9	2,612
French (men-of-war) ...	New Caledonia and islands.....	7	.....	13	.....	20	.....
French protectorate ...	Marqueesas, Pomoto, and Leeward Island.	26	1,300	83	4,117	109	5,447
Leeward Islands .....	Leeward Islands .....	.....	.....	31	1,898	31	1,898
German .....	Hamburg and Leeward Islands..	.....	.....	41	6,435	41	6,435
United States .....	San Francisco .....	.....	.....	25	4,221	25	4,221
Totals .....	.....	35	1,658	215	20,886	250	22,574

Tonnage of men-of-war unknown.





---

---

# SUPPLEMENT.

---

---

679



# METEOROLOGICAL REPORTS.

## CIRCULAR.

DEPARTMENT OF STATE,  
Washington, April 3, 1879.

To the consuls-general, consuls, and commercial agents of the United States :

GENTLEMEN: In view of representations made to the Department it is deemed desirable that the next annual report of consular affairs should contain a table showing the humidity of each month of the year at those places within their respective districts where meteorological observations are taken. For the purposes of these reports the year will be understood to be the fiscal year.

I am, gentlemen, your obedient servant,

F. W. SEWARD,  
Assistant Secretary.

## AFRICA.

### SIERRA LEONE.

*Rain-fall in Sierra Leone, Africa.*

Period.	Quantity in inches.		
	1877.	1878.	1879.
January to March.....	2.02	3.01	5.18
April to June.....	28.39	32.02	36.88
July to September.....	70.58	101.74	105.70
October to December.....	32.61	28.37	.....
Total.....	131.60	163.14	.....

The town is so situated as regards declivity, and the drains are so well arranged, that this immense amount of water is readily conveyed to the sea without doing any damage.

The health of the colony during the past rainy season has been remarkably good, the temperature ranging from 76° to 86° Fahr. in the shade.

J. A. LEWIS, *Consul.*

UNITED STATES CONSULATE,  
Sierra Leone, October 27, 1879.

## A M E R I C A .

## B R A Z I L .

## SANTOS.

*Rain-fall at Santos as shown by the hygrometer of the San Paulo Railroad since January 1, 1879.*

Months.	Day.	Night.	Average, day and night.
1879.	<i>U. S. inches.</i>	<i>U. S. inches.</i>	<i>U. S. inches.</i>
January .....	8.2	9.1	17.3
February .....	8.3	6.2	9.5
March .....	8.4	4.2	7.6
April .....	2.5	4.3	6.8
May .....	1.7	1.0	2.7
June .....	2.6	3.9	6.6
July .....	0.7	1.8	2.5
August .....	1.2	2.5	3.7
September .....	2.0	4.1	6.1
October .....	0.9	0.8	1.7
November .....	1.6	0.8	2.4
Total .....	28.1	38.7	66.8

UNITED STATES CONSULATE,  
Santos, December 9, 1879.

WM. T. WRIGHT, Consul.

## A U S T R A L I A .

## M E L B O U R N E .

The climate of Victoria does not differ materially from that of Southern Italy. "Probably in no part of the world," says a competent authority, "is it possible to find fewer impediments to out-door labor or recreation, as regards the weather, than in Victoria. Though the summer is invariably marked by a few days of great heat, yet even in this season there are many days when the weather is pleasant and cool, and nothing can exceed the climate experienced in this colony during the autumn, winter, and spring. A cloudless sky, a bright sun, and a refreshing breeze are characteristics of the greater number of days in each of those seasons; and while the salubrity of the climate is shown by the absence of those diseases which yearly sweep off so many of the inhabitants of England, it is yet equally favorable to the growth of fruits and vegetables of the colder countries." The mean temperature is 57° Fahr., and the mercury rarely falls below the freezing point. January is the hottest and July the coldest month in the year. The climate is not only pleasant but salubrious. The death-rate for Victoria, as we have already seen, is 15.53 per 1,000 of the mean population, while that of England Wales is 22.40. The following are the results of meteorological observations taken at Melbourne during the past eleven years:

[Observatory 91.3 feet above the sea-level.]

Year.	Temperature in the shade.			Mean atmospheric pressure.	Days on which rain fell.	Amount of rain-fall.	Mean relative humidity.	Amount of cloud.
	Maximum.	Minimum.	Mean.					
	°	°	°	Inches.	No.	Inches.	0-10.	0-10.
1868.....	110	27	57	29.88	120	18.27	.70	5.7
1869.....	108	27	57	29.84	129	24.59	.71	6.0
1870.....	109	30	57	29.83	129	33.78	.74	5.8
1871.....	106	32	58	29.88	125	30.17	.74	5.9
1872.....	103	32 $\frac{1}{2}$	58	29.62	136	32.52	.74	6.4
1873.....	102	30	58	29.94	134	25.61	.72	6.0
1874.....	103	29	57	29.93	134	28.10	.72	6.1
1875.....	110	31	57	29.89	158	32.87	.72	6.2
1876.....	111	29	57	29.98	134	24.04	.70	5.8
1877.....	101	31	57	29.98	124	24.10	.70	5.8
1878.....	103	31	57	29.90	116	25.86	.71	6.0

O. M. SPENCER.

## EUROPE.

## NORWAY.

## CHRISTIANIA.

The year 1878 was remarkable for its mild temperature. The mean temperature of this place was 4° 37 Reaumur, against 3° 23 in 1877. The normal mean temperature here is 4° 13 Reaumur.

On the 29th of June, the warmest day of the year, the thermometer stood at 23° 8 Reaumur, and on the coldest day, the 21st of December, at 16° under zero, Reaumur. The total rain-fall amounted to 18.4 Norwegian inches. According to instructions, I give subjoined a table of the relative humidity and rain-falls in this city during the year ending June 30, 1879.

Months.	Relative humidity.	Rain-fall.
	Percentage.	Meters.
1878.		
July.....	62	15.2
August.....	68	94.7
September.....	78	68.6
October.....	88	145.9
November.....	81	61.0
December.....	85	19.8
1879.		
January.....	84	4.1
February.....	87	25.6
March.....	73	21.4
April.....	64	26.7
May.....	59	64.4
June.....	71	101.7

GERHARD GADE, Consul.

UNITED STATES CONSULATE,  
Christiania, September 30, 1879.

## GOTHENBURG.

Statement showing the rainfall and monthly average of humidity at meteorological stations within the consular district of Gothenburg for the year ending June 30, 1879.

Months.	Rain-fall in—		Average of relative hu- midity in Gothenburg.
	Gothenburg.	Lund.	
1878.			
July .....	27.8	40.6	85
August .....	33.2	77.6	89
September .....	94.3	50.1	76
October .....	60.0	40.2	83
November .....	82.9	84.8	84
December .....	74.2	40.6	90
1879.			
January .....	5.6	24.7	
February .....	69.7	39.2	
March .....	33.7	14.3	
April .....	26.1	79.9	
May .....	100.3	40.3	
June .....	86.3	61.7	
Rain-fall for year .....	754.1	594.0	

ERNEST L. OPPENHEIM,  
Consul.

UNITED STATES CONSULATE,  
Gothenburg, September 30, 1879

## SWEDEN.

Tables of humidity for various places in Sweden during the year ending June 30, 1879.

## RAIN-FALL (RAIN AND SNOW).

[In millimeters].

Stations.	1878.						1879.					
	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.
Haparanda .....	29.9	28.9	76.0	66.8	62.4	56.1	22.9	36.4	40.8	15.9	42.4	34.4
Hernösand .....	38.5	214.7	76.5	48.2	51.4	48.5	23.5	41.8	7.7	37.5	35.6	38.0
Upsala .....	35.5	81.0	67.2	54.6	58.4	51.2	17.6	27.6	9.9	38.7	44.3	64.3
Stockholm .....	62.0	57.8	37.8	76.0	56.2	49.6	24.9	41.3	7.2	40.8	39.1	33.8
Karlstad .....	43.9	67.5	35.4	43.9	51.4	78.6	25.0	46.5	9.3	33.2	53.6	70.8
Gothenburg .....	27.8	93.2	94.3	60.0	82.9	74.2	5.6	69.7	33.7	26.1	100.3	86.3
Wisby .....	46.7	45.5	27.2	80.6	101.6	86.1	29.2	36.8	21.2	37.7	29.2	2.8
Lund .....	40.6	77.6	50.1	40.2	84.8	40.6	24.7	39.2	14.3	79.9	40.3	61.7

## MONTHLY AVERAGE OF RELATIVE HUMIDITY.

Stations.	1878.						1879.					
	July.	August.	September.	October.	November.	December.						
Haparanda .....	69.0	76.0	86.0	94.0	94.0	98.0	The calculations of the data for 1879 will not be available before 1880.					
Hernösand .....	67.0	77.0	80.0	87.0	88.0	95.0						
Upsala .....	72.1	78.2	86.4	91.0	92.3	98.0						
Stockholm .....	69.0	74.0	86.0	87.0	90.0	94.0						
Karlstad .....	67.0	70.0	73.0	85.0	84.0	87.0						
Gothenburg .....	65.0	69.0	76.0	83.0	84.0	90.0						
Wisby .....	76.8	78.0	80.0	85.0	86.0	88.0						

UNITED STATES CONSULATE, Stockholm, September 30, 1879.

NERE A. ELFWING.

## GERMANY.

## BARMEN.

*Meteorological observations at Barmen.*

[Elevation above the level of the North Sea, 485 feet. Time of observation, 8 a. m., 12 m., and 6 p. m. Temperature in degrees, Reaumur. Barometer reduced to the zero point of mercury.]

Year.	Month.	Temperature, Reaumur.			Rain-fall per square foot.	Rain. Days.	Snow. Days.	Hall. Days.	Fine. Days.	Dull. Days.	Mixed. Days.	Barometer.	
		Average, noon.	Highest.	Lowest.								Max.	Min.
1868.	July	+ 19.40	+ 25.5	+ 10.0	Paris in.	13						" "	" "
	August	+ 18.17	+ 25.0	+ 9.0	3.54	15	19		19	4	8	27 10.4	27 4.4
	September	+ 16.31	+ 23.5	+ 6.5	1.14	8	11		11	14	6	27 10.5	27 2.7
	October	+ 9.70	+ 15.5	+ 12.5	3.50	21	18	1	18	15	7	27 11.4	27 4.7
	November	+ 4.64	+ 9.25	+ 1.75	2.45	15	15		4	23	8	27 10.9	27 2.6
	December	+ 6.38	+ 10.0	+ 1.75	4.65	22	6		2	23	3	28 0.9	27 2.5
	January	+ 2.98	+ 9.0	- 0.5	2.10	12	4	2	12	13	6	27 11.8	26 8.1
	February	+ 6.74	+ 10.0	- 0.5	2.09	16	3	2	12	13	6	28 1.4	27 1.5
	March	+ 8.70	+ 18.5	- 2.5	1.08	7	11	1	6	19	3	27 11.4	27 0.9
	April	+ 12.10	+ 19.75	+ 5.0	0.55	9			14	6	10	27 1.4	27 0.7
	May	+ 13.20	+ 17.0	+ 5.0	2.60	21			14	17	10	27 8.8	27 0.5
	June	+ 13.31	+ 21.25	+ 7.0	0.90	14			4	15	11	27 10.9	27 3.2
					23.60	173	24	7	108	173	84		
1870.	July	+ 12.40	+ 22.25	+ 10.0	Inches.	15			6	16	9	27 9.1	27 3.1
	August	+ 14.70	+ 21.0	+ 8.75	1.75	19			2	22	7	27 8.9	27 0.4
	September	+ 12.88	+ 17.0	+ 5.0	5.51	9			13	12	5	28 0.8	27 9.2
	October	+ 9.62	+ 14.0	+ 7.75	1.72	20		1	5	20	6	28 1.4	28 7.0
	November	+ 6.13	+ 12.0	+ 0.0	6.40	15	2		1	22	7	27 11.8	28 8.1
1871.	December	+ 0.81	+ 9.5	- 14.0	1.62	15	15		3	22	4	28 0.4	28 11.8
	January	+ 0.09	+ 4.50	- 11.50	3.71	7	14		3	23	5	27 11.1	28 11.5
	February	+ 3.90	+ 8.75	- 8.0	1.20	14	3		4	19	5	27 11.8	27 3.3
	March	+ 8.43	+ 15.75	- 1.25	2.20	5	7	1	11	13	7	28 2.3	27 4.3
	April	+ 8.69	+ 13.50	+ 5.50	1.0	8	3	2	7	16	7	27 9.8	27 0.8
	May	+ 11.05	+ 19.50	+ 3.75	2.95	21	1		7	14	10	27 10.4	27 4.5
		+ 13.52	+ 23.0	+ 6.0	4.80	20						27 7.4	27 3.6
					38.16	165	45	4	63	200	72		



*Meteorological observations at Barmen—Continued.*

Year.	Month.	Temperature, Reanmur.			Rain-fall per square foot.	Rain. Days.	Snow. Days.	Hall. Days.	Fine. Days.	Dull. Days.	Mixed. Days.	Barometer.	
		Average, noon.	Highest.	Lowest.								Max.	Min.
1872.....	July.....	+ 18.6	+ 25.0	+ 11.0	Inches. 2.5	Days. 15	.....	Days. 1	Days. 10	Days. 8	Days. 13	" "	" "
	August.....	+ 16.2	+ 23.0	+ 11.0	2.0	12	.....	.....	9	11	11	27 8.9	27 3.6
	September.....	+ 14.0	+ 21.0	+ 9.0	2.1	14	.....	.....	7	9	9	27 10.1	27 3.7
	October.....	+ 10.5	+ 15.0	+ 4.0	3.2	17	.....	.....	7	20	9	27 11.3	27 2.7
	November.....	+ 7.0	+ 11.0	+ 1.5	3.0	21	.....	.....	2	21	4	27 11.9	27 2.6
	December.....	+ 6.0	+ 8.0	- 0.2	3.6	17	.....	.....	2	15	7	27 11.1	26 11.1
1873.....	January.....	+ 4.9	+ 9.0	- 2.0	3.0	13	.....	.....	6	16	9	27 8.9	26 10.4
	February.....	+ 2.0	+ 7.0	- 4.5	1.3	9	.....	.....	2	21	5	27 10.1	26 4.2
	March.....	+ 8.1	+ 15.0	- 1.0	1.0	10	.....	2	10	10	11	28 3.8	27 10.2
	April.....	+ 9.1	+ 18.0	- 0.5	1.8	10	.....	2	8	14	8	27 1.0	26 10.6
	May.....	+ 12.3	+ 16.0	+ 6.0	3.4	22	.....	1	3	18	10	27 9.5	27 1.7
	June.....	+ 15.8	+ 21.0	+ 8.0	2.4	13	.....	.....	8	7	15	27 9.2	27 2.1
1874.....	July.....	+ 18.3	+ 23.5	+ 12.0	Inches. 0.74	Days. 173	34	6	79	173	113	.....	.....
	August.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	September.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	October.....	+ 11.2	+ 10.0	+ 2.0	2.83	9	.....	.....	7	6	18	27 10.0	27 0.5
	November.....	+ 4.3	+ 10.7	+ 6.0	3.30	15	.....	.....	3	21	6	28 1.0	26 9.1
	December.....	+ 1.4	+ 7.5	+ 10.0	3.20	9	.....	.....	1	29	1	27 10.5	26 6.0
1875.....	January.....	+ 5.0	+ 9.0	- 3.1	2.68	14	.....	1	3	20	8	28 2.4	27 0.7
	February.....	+ 1.5	+ 5.0	- 7.5	0.69	4	.....	.....	4	14	10	27 11.2	27 1.3
	March.....	+ 4.5	+ 12.0	- 4.5	1.83	10	.....	.....	9	17	5	28 0.8	27 3.6
	April.....	+ 10.0	+ 16.0	+ 2.2	0.28	8	.....	.....	13	4	13	27 11.9	27 1.6
	May.....	+ 13.0	+ 18.0	+ 7.0	1.98	13	.....	2	8	12	11	27 11.0	27 3.7
	June.....	+ 16.0	+ 22.0	+ 10.0	2.67	18	.....	2	8	14	8	27 8.7	27 3.6
1876.....	July.....	.....	.....	.....	.....	Days. 111	46	6	71	144	89	.....	.....
	August.....	+ 20.0	+ 22.5	+ 11.0	Liters. 7.5	14	.....	.....	7	8	16	27 0.4	27 5.1
	September.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	October.....	+ 11.6	+ 18.0	+ 0.7	3.7	9	.....	.....	9	10	12	27 11.5	27 2.1
	November.....	+ 5.0	+ 11.5	- 4.7	6.0	17	.....	.....	4	16	10	27 10.5	27 1.7
	December.....	+ 5.4	+ 10.0	- 7.5	5.0	14	.....	.....	4	24	3	27 10.9	26 6.5
1877.....	January.....	+ 5.15	+ 11.5	- 1.8	14.0	20	.....	.....	4	23	4	28 2.6	26 10.5
	February.....	+ 6.35	+ 14.5	- 2.0	14.0	21	.....	.....	.....	23	3	27 11.8	26 6.5

1878.....	March.....	4.5	+ 10.5	- 7.0	11.0	17	9	1	3	17	11	27 11.7	26 9.2
	April.....	+ 8.26	+ 15.5	+ 1.7	4.5	16	1	1	6	9	15	27 9.7	27 1.8
	May.....	+ 10.9	+ 15.3	+ 2.7	5.0	21	8	.....	5	17	9	27 2.2	27 1.9
	June.....	+ 17.4	+ 24.0	+ 11.5	4.0	9	.....	.....	10	4	16	27 11.2	27 4.7
		.....	.....	.....	78.2	158	30	6	52	145	99	.....	.....
		.....	.....	.....	Liters.	.....	.....	.....	.....	.....	.....	.....	.....
	July.....	+ 15.1	+ 21.5	+ 9.0	6.0	18	.....	.....	3	13	15	27 10.1	27 4.4
	August.....	+ 16.2	+ 21.0	+ 8.0	5.0	14	.....	.....	5	7	19	27 9.7	27 1.1
	September.....	+ 13.2	+ 19.5	+ 3.5	4.0	13	.....	.....	8	6	16	27 10.0	27 2.7
	October.....	+ 9.8	+ 14.5	+ 2.0	4.0	13	.....	.....	8	15	8	27 11.3	26 9.3
	November.....	+ 4.0	+ 10.0	- 1.5	7.0	17	1	.....	4	23	3	27 10.8	26 10.3
	December.....	+ 1.1	+ 9.0	- 4.0	10.0	10	4	.....	.....	24	7	27 11.1	26 11.0
1879.....	January.....	- 0.45	+ 8.0	- 9.5	8.0	5	15	.....	3	19	9	27 11.4	27 0.3
	February.....	+ 2.3	+ 9.5	- 4.5	8.0	10	13	.....	3	17	8	27 9.0	26 9.0
	March.....	+ 4.5	+ 10.5	- 3.0	0.5	7	5	.....	9	9	13	28 2.4	27 3.1
	April.....	+ 7.6	+ 13.5	- 1.5	6.0	18	5	.....	1	17	12	27 9.3	26 9.7
	May.....	+ 14.7	+ 16.5	+ 2.0	4.0	15	.....	2	6	5	20	27 11.5	27 11.2
	June.....	+ 14.8	+ 19.5	+ 9.0	7.0	17	.....	.....	8	4	18	27 9.6	27 3.6
		.....	.....	.....	69.5	157	50	2	58	159	148	.....	.....

EDGAR STANTON, Consul.

UNITED STATES CONSULATE.  
Barmen, September 30, 1878.

## BERLIN AND FRANKFORT-ON-THE-ODER.

In compliance with circular instructions, under date of the 3d of April, 1879, I beg to subjoin a table showing the humidity of each month of the year ending June 30, 1879, at the meteorological stations in the cities of Berlin and Frankfort-on-the-Oder, as follows, viz:

Month.	Berlin.		Frankfort-on-the-Oder.	
	Absolute humidity.	Relative humidity.	Absolute humidity.	Relative humidity.
1878.				
July .....	<i>French lines.</i> 4.51	<i>Percentage.</i> 70	<i>French lines.</i> 4.44	<i>Percentage.</i> 78
August .....	5.06	71	5.05	74
September .....	4.33	73	4.23	77
October .....	3.53	79	3.43	83
November .....	2.31	81	2.28	85
December .....	1.86	85	1.84	91
1879.				
January .....	1.52	88	1.48	94
February .....	1.90	88	1.93	90
March .....	1.82	75	1.80	83
April .....	2.38	73	2.40	78
May .....	3.04	61	3.09	66
June .....	4.42	66	4.37	69

H. KREISMANN, *Consul-General.*

UNITED STATES CONSULATE-GENERAL,  
*Berlin, September 30, 1879.*

## BRESLAU.

In accordance with instructions the following table is given showing the average humidity for each month in the year ending June 30, 1879, in every place in the district where observations were made:

	1878.					
	July.	August.	September.	October.	November.	December.
Breslau .....	70.6	77.4	70.9	79.5	84.1	83.9
Beuthen .....	77.4	81.3	81.2	87.8	89.5	92.3
Bromberg .....	74.8	75.9	80	89.4	91.7	90.3
Eichberg .....	76.8	78.8	76.8	77.4	82.4	84.8
Goerlitz .....	70	74	74	79	82	86
Grünberg .....	89.4	81.3	70.1	84	86.8	90.4
Guhrau .....	74	73	70	80	84	89
Oppeln .....	69.2	74.9	73	82.8	86.6	84.8
Posen .....	72.3	71.4	72.7	82.6	84.9	89.2
Ratibor .....	69.2	72.5	73.4	80.8	82.9	85.6
	1879.					
	January.	February.	March.	April.	May.	June.
Breslau .....	87.4	84	78.3	75.7	71.3	69.3
Beuthen .....	94.9	98.9				
Bromberg .....	93.3	91.3	81.7	78.6	66.6	68
Eichberg .....	90.3	86.5	80.6	76.9	75.2	
Goerlitz .....	89	86	80	74	69	69
Grünberg .....	93.9	90.3	87	78.3	74.2	73.4
Guhrau .....	90	87	80	75	71	68
Oppeln .....	88.3	86.6	78.9	76.9	77.4	74
Posen .....	88.4	86.9	81.7	77.8	69	66.9
Ratibor .....	84.9	84.2	78	75.5	75.3	

HENRY DITHMAR, *Consul.*

UNITED STATES CONSULATE,  
*Breslau, October 1, 1879.*

## CHEMNITZ.

*Statement showing the humidity of the atmosphere at Chemnitz, Saxony, during the year ending September 30, 1879.*

Months.	Highest.	Lowest.	Mean.
1878.			
October .....	74.5	72.4	73.4
November .....	74.6	72.1	73.1
December .....	74.3	72	72.9
1879.			
January .....	74.4	72	73.6
February .....	73.9	71	72.5
March .....	75.1	72.4	73.5
April .....	73.6	71.8	72.8
May .....	74.1	72.2	73.3
June .....	73.8	72.5	73.2
July .....	74	72.5	73.1
August .....	73.9	72.8	73.4
September .....	74.6	73	73.5

UNITED STATES CONSULATE,  
Chemnitz, October 1, 1879.

N. K. GRIGGS, *Consul.*

## COLOGNE.

*Table showing the humidity of the atmosphere and rainfall.*

Months.	Treves (Trier).		Godesberg.		Cologne.	
	Mean of relative humidity.	Monthly rain-fall.	Mean of relative humidity.	Monthly rain-fall.	Mean of relative humidity.	Monthly rain-fall.
1878.	<i>Per cent.</i>	<i>Parisian lines.</i>	<i>Per cent.</i>	<i>Parisian lines.</i>	<i>Per cent.</i>	<i>Parisian lines.</i>
July .....	70.88	11.54	78.30	21.77	82.66	19.08
August .....	74.16	38.98	80.23	35.45	83.20	40.16
September .....	76.90	8.26	80.88	9.97	86.89	9.66
October .....	82.70	48.33	80.95	14.68	87.72	18.16
November .....	81.31	29.63	81.53	18.14	86.32	27.91
December .....	86.85	24.38	87.90	21.89	86.35	20.53
1879.						
January .....	84.72	27.86	86.70	27.75	81.65	33.65
February .....	81.97	26.64	80.16	21.13	81.81	29.25
March .....	73.26	5.29	73.16	4.17	73.99	5.62
April .....	73.34	14.32	76.77	25.86	75.26	24.58
May .....	(*)	16.02	75.22	36.91	71.16	30.29
June .....	71.49	46.71	75.22	39.92	74.33	48.37

\* Not noted on account of illness of the observer.

NOTE.—11.2595 Parisian lines equal to 1 English inch.

UNITED STATES CONSULATE,  
Cologne, September 30, 1879.

GEORGE E. BULLOCK, *Consul.*

## CREFELD.

Table showing rainfall, snowfall, and thunder-storms observed at Crefeld from July 1, 1878 to June, 30, 1879.

Months.	Quantity.	Rain and snow.	Thunder-storms.
1878.	<i>Parislines.</i>	<i>Days.</i>	<i>Days.</i>
July.....	26.9	17	4
August.....	33.7	16	8
September.....	11.2	13	1
October.....	26.4	16	1
November.....	36.8	20	
December.....	23.7	20	
1879.			
January.....	33.8	15	
February.....	31	17	
March.....	7.4	13	
April.....	43.8	20	2
May.....	11.9	11	4
June.....	50.9	20	9
Total.....	337.5	198	29

UNITED STATES COMMERCIAL AGENCY.  
Crefeld, September 30, 1879.

BRET HARTE, *Commercial Agent.*

## FRANKFORT-ON-THE-MAIN.

I regret that it has been impossible to obtain a table of the humidity of the atmosphere during each month of the past year, as desired by Department circular of April 3 last. Owing to the imperfection of instruments used, no accurate observations of humidity have been made here for several months past, and the association having charge of the matter prefers not to communicate an incorrect tabulation, at the same time promising that from this time on correct observations shall be taken and furnished to this office. In lieu of a monthly table for this year I inclose, marked M, a table showing the average humidity during each season of 1878, together with the average rainfall and temperature, and the death-rate per thousand inhabitants in this city during that year.

ALFRED E. LEE,  
*Consul-General.*

UNITED STATES CONSULATE-GENERAL,  
*Frankfort-on-the-Main, September 30, 1879.*

*Average temperature, humidity of the atmosphere, and rainfall at Frankfort-on-the-Main during the year 1878.*

[Temperature—Reaumur.]

Annual variation:	
Average annual temperature.....	+ 8.03
Maximum.....	+23.9
Minimum.....	— 7.8
November, 1877:	
Maximum.....	+13.5
Minimum.....	0
Average of month.....	+ 5.19

December, 1877 :	
Maximum.....	+ 7.8
Minimum.....	— 3.8
Average of month.....	+ 1.58
January, 1878 :	
Maximum.....	+ 7.7
Minimum.....	+ 7.3
Average of month.....	+ 0.81
February, 1878 :	
Maximum.....	+11.6
Minimum.....	— 5.3
Average of month.....	+ 2.97
March, 1878 :	
Maximum.....	+11.8
Minimum.....	— 2.8
Average of month.....	+ 3.8
April, 1878 :	
Maximum.....	+18
Minimum.....	+ 0.8
Average of month.....	+ 8.53
May, 1878 :	
Maximum.....	+23
Minimum.....	+ 4.2
Average of month.....	+12.26
June, 1878 :	
Maximum.....	+23.2
Minimum.....	+ 5.8
Average of month.....	+14.19
July, 1878 :	
Maximum.....	+23.9
Minimum.....	+ 6.9
Average of month.....	+14.73
August, 1878 :	
Maximum.....	+23.7
Minimum.....	+ 8
Average of month.....	+14.92
September, 1878 :	
Maximum.....	+21.8
Minimum.....	+ 3.7
Average of month.....	+12.44
October, 1878 :	
Maximum.....	+16.8
Minimum.....	+ 9.7
Average of month.....	+ 8.31
Average humidity, by Klinkerfues's hygrometer :	
Winter.....	77
Spring.....	66.6
Summer.....	75.6
Autumn.....	85
Average rainfall, stated in Paris lines :	
Winter.....	53.81
Spring.....	90.51
Summer.....	112.01
Autumn.....	82.76
Per cent. of rainfall greater than average.....	27
Number of cloudy days :	
Winter.....	80
Spring.....	58
Summer.....	51
Autumn.....	60
Nature of soil : Alluvium.	
Electrical phenomena—thunderstorms.....	34
Annual death rate per thousand inhabitants at Frankfort-on-the-Main :	
Death rate, exclusive of stillborn.....	21.4
Diseases :	
Pulmonary.....	871
Kidney.....	46
Liver.....	37
Heart.....	13.5
Death rate, 1851-75, per thousand.....	18.9

## MANNHEIM.

*Humidity of each month of the year.*

Meteorological stations.	1878.											
	July.		August.		September.		October.		November.		December.	
	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.
	mm.	Perct.	mm.	Perct.	mm.	Perct.	mm.	Perct.	mm.	Perct.	mm.	Perct.
Meersburg.....	10.84	71	12.14	78	10.32	81	7.84	82	4.84	83	3.69	86
Höchenschwand.....	8.98	77	9.88	84	8.39	84	6.58	86	3.88	86	3.11	86
Donaueschingen.....	10.83	84	10.98	85	8.92	84	6.91	87	4.44	95	3.99	93
Killingen.....	11.26	87	11.37	85	9.80	84	7.10	89	4.21	95	3.28	96
Freiburg.....	11.59	72	12.33	74	9.96	75	7.93	78	4.96	79	4.18	89
Baden-Baden.....	11.62	79	12.41	83	10.57	86	8.25	88				
Karlsruhe.....	12.24	78	13.06	82	11.07	85	8.25	86	5.18	82	4.10	89
Bretten.....	12.27	81	12.69	81	10.96	86	8.23	87	5.11	83	4.09	90
Mannheim.....	11.89	72	12.43	77	10.65	78	8.29	86	5.19	81	4.13	87
Heidelberg.....	11.74	76	12.70	80	10.59	82	8.67	87	5.36	81	4.20	87
Buchen.....	10.95	77	11.94	82	10.12	85	7.69	89	4.98	89	3.65	89
Wertheim.....	13.67	93	13.76	93	10.99	88	8.18	90	5.10	87	4.10	93
Straßburg.....		72.7		77.8		78.4		86.9		82.2		89.6

Meteorological stations.	1879.											
	January.		February.		March.		April.		May.		June.	
	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.	Absolute.	Relative.
	mm.	Perct.	mm.	Perct.	mm.	Perct.	mm.	Perct.	mm.	Perct.	mm.	Perct.
Meersburg.....	3.86	83	4.71	84	5.00	80	5.68	74	6.80	74	10.18	72
Höchenschwand.....	3.49	87	3.95	92	4.18	81	4.72	82	5.43	81	8.45	77
Donaueschingen.....	3.89	98	4.37	92	4.80	89	5.15	81	6.10	79	9.88	75
Killingen.....	3.49	96	4.45	94	4.85	92	5.89	90	7.00	90	10.97	86
Freiburg.....	4.21	75	5.21	86	5.45	80	6.12	77	7.03	75	10.94	70
Baden-Baden.....									7.35	78	10.84	77
Karlsruhe.....	4.12	87	5.07	83	5.02	76	6.31	78	7.43	72	11.45	75
Bretten.....	4.17	91	5.01	86	5.14	82	6.32	78	7.52	74	11.50	76
Mannheim.....	3.90	83	4.77	81	4.87	74	6.02	71	6.57	60	10.23	65
Heidelberg.....	4.17	86	5.15	85	5.11	80	6.27	76	7.29	71	11.11	76
Buchen.....	3.70	87	4.63	90	4.60	86	6.01	81	7.13	74	10.90	79
Wertheim.....	4.06	93	4.83	89	4.95	88	6.49	82	7.62	75	11.20	80
Straßburg.....		87		81.9		76.8		75		68.3		70.5

EDWARD M. SMITH, *Consul.*UNITED STATES CONSULATE, *Mannheim, September 30, 1879.*

## NUREMBERG.

*Table furnished by the Meteorological Bureau at Nuremberg.*

Months.		Tempera- ture.	Absolute moisture.	Relative moisture.	Rain, &c.*
1878.		Celsius.	mm.	Per cent.	mm.
July.....		16.8	10.69	75	95.2
August.....		17.5	11.63	78	55.0
September.....		14.3	10.09	83	63.2
October.....		9.3	7.73	86	48.1
November.....		2.6	4.86	86	33.6
December.....		2.1	3.70	90	51.7

\*Average rates for the months indicated.

Table furnished by the Meteorological Bureau at Nuremberg—Continued.

Months.	Temperature.	Absolute moisture.	Relative moisture.	Rain, &c.
1879.	Celsius.	mm.	Per cent.	mm.
January .....	1.2	3.76	88	52.5
February .....	1.7	4.48	85	77.6
March .....	2.2	4.37	78	20.2
April .....	7.3	5.45	69	51.5
May .....	10.5	7.31	67	110.5
June .....	16.5	10.60	69	65.2

## MOISTURE.

Time of observation:

To December 31, 1878: 7 o'clock, morning.  
2 o'clock, afternoon.  
8 o'clock, evening.  
Since January 1, 1879: 8 o'clock, morning.  
2 o'clock, afternoon.  
8 o'clock, evening.

JAMES M. WILSON, *Consul*.

UNITED STATES CONSULATE, Nuremberg, September 30, 1879.

## STUTTGART.

Table showing the temperature and humidity of the atmosphere at Stuttgart for the year ending June 30, 1879; also the prevailing winds, the rainfall, and the number of cloudy days during the same period.

## TEMPERATURE AND HUMIDITY.

Months.	Temperature.			Humidity of atmosphere.
	Maxima.	Minima.	Average.	
1878.	Celsius.	Celsius.	Celsius.	Per cent.
July .....	+30.0	+7.0	+19.56	78
August .....	+28.5	+8.0	+18.49	79
September .....	+27.3	+3.2	+15.00	84
October .....	+21.0	+0.7	+10.00	85
November .....	+12.0	+5.4	+3.25	84
December .....	+14.5	+14.0	+0.56	88
1879.				
January .....	+12.6	+14.5	+0.03	89
February .....	+16.0	+4.0	+3.12	84
March .....	+16.5	+7.0	+4.70	80
April .....	+21.7	+2.5	+8.09	74
May .....	+23.6	+1.0	+11.18	70
June .....	+34.0	+5.5	+17.94	70
Annual variations .....	+34.0	+14.5		

## WINDS, RAINFALL, AND CLOUDY DAYS.

Seasons.	Prevailing winds.	Rainfall.	Cloudy days.
1878.		mm.	
Summer .....	Southwest .....	296	80
Autumn .....	do. ....	132	81
1879.			
Winter .....	Southwest .....	143	88
Spring .....	do. ....	190	87
Total .....		758	336

UNITED STATES CONSULATE, Stuttgart, October 15, 1879.

J. S. POTTER, *Consul*.



## THE NETHERLANDS.

*Scientific report from the Royal Meteorological Institute at Utrecht, Netherlands, respecting the relative humidity in each month of the year ending June 30, 1879.*

Cities.	1878.					
	July.	August.	September.	October.	November.	December.
8 a. m.:						
Utrecht .....	0.766	0.825	0.839	0.995	0.914	0.936
Helder .....	0.822	0.846	0.851	0.849	0.877	0.876
Groningen .....	0.858	0.900	0.926	0.937	0.950	0.950
Vlissingen .....	0.730	0.808	0.821	0.840	0.900	0.918
Maastricht .....	0.800	0.830	0.890	0.890	0.880	0.900
2 p. m.:						
Utrecht .....	0.625	0.684	0.712	0.747	0.829	0.806
Helder .....	0.770	0.750	0.753	0.787	0.830	0.881
Groningen .....	0.725	0.756	0.788	0.832	0.905	0.905
Vlissingen .....	0.650	0.684	0.687	0.747	0.830	0.890
Maastricht .....	0.700	0.680	0.830	0.780	0.830	0.870
8 p. m.:						
Utrecht .....	0.861	0.904	0.909	0.911	0.906	0.927
Helder .....	0.823	0.832	0.819	0.837	0.845	0.880
Groningen .....	0.874	0.896	0.912	0.920	0.944	0.944
Vlissingen .....	0.750	0.828	0.826	0.825	0.904	0.908
Maastricht .....	0.770	0.780	0.840	0.860	0.890	0.890

Cities.	1879.					
	January.	February.	March.	April.	May.	June.
8 a. m.						
Utrecht .....	0.914	0.917	0.852	0.809	0.689	0.747
Helder .....	0.854	0.900	0.857	0.865	0.824	0.847
Groningen .....	0.887	0.887	0.887	0.891	0.797	0.845
Vlissingen .....	0.930	0.930	0.880	0.830	0.780	0.740
Maastricht .....	0.930	0.930	0.880	0.880	0.750	0.740
2 p. m.						
Utrecht .....	0.813	0.817	0.691	0.650	0.598	0.631
Helder .....	0.807	0.865	0.775	0.804	0.717	0.806
Groningen .....	0.767	0.767	0.767	0.740	0.662	0.718
Vlissingen .....	0.890	0.870	0.760	0.750	0.650	0.590
Maastricht .....	0.900	0.870	0.690	0.800	0.600	0.590
8 p. m.						
Utrecht .....	0.906	0.911	0.856	0.854	0.813	0.862
Helder .....	0.862	0.902	0.835	0.857	0.807	0.832
Groningen .....	0.872	0.872	0.872	0.876	0.823	0.842
Vlissingen .....	0.880	0.900	0.849	0.850	0.780	0.780
Maastricht .....	0.920	0.920	0.830	0.860	0.690	0.736

UNITED STATES CONSULATE, Rotterdam, October 15, 1879.

**BELGIUM.****METEOROLOGICAL OBSERVATIONS.**

Notwithstanding the fact that the territorial limits of Belgium lie chiefly between the 49th and 51st degrees of north latitude, a large portion of the kingdom enjoys a comparatively mild, and in some respects, a peculiar, climate. With less than 50 miles of sea-coast, and without any high mountain ranges to favor the refrigeration of drifting vapor, and thus induce aqueous precipitation, the entire kingdom, hygrometrically considered, possesses a decidedly humid atmosphere.

**TEMPERATURE.**

The mean annual temperature at Brussels, as ascertained by observations made through a series of years, is 50° Fahr.; the mean for the spring months, 49° Fahr.; summer, 64° Fahr.; autumn, 51° Fahr.; and winter, 36° Fahr. The highest temperature recorded within the last 20 years is 84° Fahr. and the lowest, zero, showing a difference of 84° between these recorded extremes, the latter having occurred in the month of January, 1861, and the former in July, 1872.

**HUMIDITY.**

Assuming 100 to be the maximum of humidity with which an atmosphere can be charged without precipitation, the air of Brussels holds an annual mean of no less than 77 per cent. during the day; but observations made, including both day and night, give a mean of 81 per cent. This humidity varies considerably in the different months of the year, December giving the highest rate and May the lowest; that of the former being 89 and the latter 67.

**RAINFALL.**

Under this head both the direct precipitation of rain and the estimated liquid measure of the fall of snow and hail are included. The record of observations made at Brussels during a period of fifteen years shows the mean annual fall of these forms of condensed aqueous vapor to be 696 millimeters, or 27.61 inches, the highest monthly mean being 76 and the lowest 38 millimeters, the former occurring in July and the latter in April. The annual mean of days in which it rained is 196, the highest monthly mean occurring in November and the lowest in April.

As a further striking proof of the humidity of this atmosphere, I need only mention that the annual mean of days in which the heavens are without a cloud, calculated from observations made during the fifteen years above mentioned, is but 5, while the mean of days in which they are obscured by fog amounts to 75.

Although the number of days in which it rains in this country is large, the manifestations of electricity evinced by lightning and thunder are comparatively rare, the annual mean of days in which they occur being only 19. This is, indeed, a peculiar feature of the climatic elements of this country. A heavy fall of rain is rarely preceded by somber clouds charged with electric fluid drifting up from the horizon, but, on the con-

trary, it often happens that half an hour before the greatest down-pour of rain, the heavens are clear and the sky serene, yet, by an apparently subtle condensation of the atmospheric vapor, only to be accounted for upon the theory of a diffuse electric presence in the cloud region, the sky becomes quickly overcast, and rain at once commences to fall without either lightning or thunder.

The herewith inclosed hygrometrical table, compiled from data kindly furnished me by the director of the Brussels Observatory, will show the different phases of climatic condition at this city during the fiscal year ended July 31, 1879.

JNO. WILSON.

CONSULATE OF THE UNITED STATES,  
*Brussels, August 30, 1879.*

*Meteorological observations made at Brussels during the fiscal year ended June 30, 1879.*

Months.	Monthly mean.			Number of days of—		
	Tempera- ture.	Humidity.	Rainfall.	Rain.	Snow.	Hail.
1878.	<i>Cent.</i>		<i>Millimeters.</i>			
July .....	17.4	78	46.1	15	0	1
August .....	17.9	78	148.8	23	0	0
September .....	15.0	84	75.0	16	0	0
October .....	10.6	87	66.5	16	1	2
November .....	4.5	85	167.6	23	2	3
December .....	0.7	90	66.0	18	16	0
1879.						
January .....	0.5	88	54.9	11	11	1
February .....	2.4	85	79.9	24	12	0
March .....	5.4	81	20.4	15	6	0
April .....	7.7	78	61.7	22	1	3
May .....	10.5	68	32.8	15	1	0
June .....	16.2	73	97.1	22	0	0
Annual .....	Mean...9.0	Mean...81½	916.8	220	50	10

## THE UNITED KINGDOM.

## BALLYMENA.

*Rainfall each month from July, 1878, until June 30, 1879.*

[Latitude 54° 52' N.; longitude 6° 18' W.]

Months.	Rain-gauge.			Depth of rain.
	Diameter.	Height above ground.	Height above sea-level.	
1878.				
July .....	5	Foot.	Feet.	Inches.
August .....		1	150	1. 72
September .....		1	150	4. 23
October .....		1	150	2. 70
November .....		1	150	4. 70
December .....		1	150	3. 91
.....		1	150	3. 72
1879.				
January .....		1	150	2. 51
February .....		1	150	2. 16
March .....		1	150	2. 60
April .....		1	150	2. 56
May .....		1	150	4. 42
June .....		1	150	4. 99

JAS. W. DONNAN, *Consul.*

UNITED STATES CONSULATE,  
Belfast, August 20, 1879.

## BELFAST.

*Table showing humidity of each month from July 1, 1878, to June 30, 1879.*

[Latitude 54° 36' 8".5 N.; longitude 5° 55' 53".7 W.]

Months.	Wet days.	Dry days.	Rainfall.	Average barometer.	Average thermom.
1878.					
July .....	8	23	Inches.		Fahr.
August .....	20	11	1.40	30.34	63
September .....	18	12	2.85	29.39	65
October .....	19	12	2.78	29.68	60.50
November .....	15	15	2.95	29.65	49
December .....	2	Frozen.	1.74	29.93	43
1879.					
January .....	2	Frozen.	1.94	29.15	20
February .....	No record.	No record.	2.15	30	35
March .....	do	do	1.82	29	37
April .....	do	do	1.83	30	35
May .....	do	do	1.62	29	50
June .....	21	9	4.43	29.66	55
Total .....	105	82	5.51	25.20	65

JAS. W. DONNAN, *Consul.*

UNITED STATES CONSULATE,  
Belfast, September 16, 1879.

## BRADFORD.

*Meteorological report from July 1, 1877, to June 30, 1879.*

Date.	Barometer.	Thermometer.	Humidity of the atmosphere (complete saturation equaling 100).	Date.	Barometer.	Thermometer.	Humidity of the atmosphere (complete saturation equaling 100).
1877.	<i>Inches.</i>	<i>Fahr.</i>	0 to 100.	1877.	<i>Inches.</i>	<i>Fahr.</i>	0 to 100.
July 1	30.018	62.4	65	Sept. 10	30.101	55.0	81
2	29.987	59.0	66	11	29.832	56.0	87
3	29.827	54.9	75	12	29.707	58.7	71
4	29.926	57.0	59	13	29.850	56.2	80
5	29.882	57.5	59	14	29.756	59.2	72
6	29.858	55.0	67	15	29.899	51.4	99
7	30.092	55.0	70	16	30.340	53.0	74
8	30.184	56.2	68	17	30.310	52.2	75
9	30.157	55.9	61	18	30.367	52.2	73
10	30.106	64.1	71	19	30.072	56.0	80
11	30.058	59.0	68	20	29.847	51.0	72
12	29.983	59.0	71	21	29.864	48.7	72
13	29.773	60.0	67	22	29.970	46.8	73
14	29.561	64.0	70	23	29.958	51.8	61
15	29.003	52.0	99	24	30.079	48.5	70
16	29.291	57.0	89	25	30.180	48.2	77
17	29.377	58.4	84	26	30.272	56.6	81
18	29.800	55.8	84	27	30.408	46.8	90
19	29.770	58.6	70	28	30.339	45.0	96
20	29.819	56.4	61	29	30.294	52.9	87
21	29.862	58.6	76	30	30.280	53.1	71
22	29.686	61.4	80	Oct. 1	30.198	50.4	90
23	29.495	63.7	78	2	30.113	46.4	81
24	29.491	60.6	89	3	30.031	40.9	96
25	29.823	59.4	63	4	30.220	42.6	95
26	29.912	61.6	76	5	30.485	40.6	95
27	30.088	61.0	64	6	30.693	43.7	93
28	30.137	57.0	85	7	30.438	53.0	86
29	30.186	64.0	80	8	30.269	49.0	67
30	30.223	63.2	85	9	30.373	46.8	64
31	30.014	61.9	79	10	30.028	49.0	83
Aug. 1	29.920	57.7	65	11	29.793	49.0	67
2	29.947	56.0	57	12	29.857	44.0	80
3	30.076	56.9	71	13	29.626	58.4	78
4	30.018	54.6	60	14	29.626	58.0	76
5	30.041	62	61	15	29.577	49.0	69
6	29.905	64	79	16	30.009	41.7	81
7	29.604	67	73	17	30.287	40.4	71
8	29.360	65	74	18	30.304	35.9	80
9	29.424	65	82	19	30.196	47.2	80
10	29.740	64	82	20	30.076	50.0	89
11	29.997	64	57	21	29.745	51.6	89
12	30.119	59	76	22	29.618	54.3	79
13	30.125	62.3	81	23	29.522	46.0	86
14	30.121	61.4	79	24	29.395	46.0	85
15	29.948	61.0	81	25	29.350	47.0	92
16	29.933	64.0	77	26	29.784	48.0	86
17	29.991	63.4	72	27	29.674	52.9	81
18	30.116	61.4	84	28	29.991	50.3	82
19	29.705	64.0	74	29	29.580	51.4	100
20	29.820	61.4	94	30	29.716	50.1	84
21	29.467	61.0	78	31	30.028	50.0	75
22	29.543	58.2	94	Nov. 1	30.358	49.8	78
23	30.142	53.7	73	2	30.831	47.1	78
24	30.151	57.0	65	3	29.996	46.0	78
25	30.017	53.0	78	4	29.874	49.2	68
26	29.677	56.4	86	5	29.596	48.2	83
27	29.910	54.9	92	6	29.445	55.0	83
28	29.488	63.0	71	7	29.668	49.6	82
29	29.968	58.6	68	8	29.749	46.0	85
30	29.596	58.4	63	9	29.499	52.1	79
31	29.727	55.4	63	10	29.153	49.0	75
Sept. 1	30.045	53.7	62	11	29.032	47.7	80
2	29.919	53.0	73	12	29.770	42.2	77
3	29.942	46.8	89	13	29.274	41.0	90
4	30.296	51.0	68	14	29.986	42.0	85
5	30.267	53.8	73	15	30.141	52.0	89
6	29.979	54.0	80	16	30.171	49.4	73
7	29.981	51.5	79	17	30.340	43.4	89
8	30.130	52.0	84	18	29.957	46.0	86
9	30.183	53.2	74	19	29.787	41.4	83

*Meteorological report from July 1, 1877, to June 30, 1879—Continued.*

Date.	Barometer.	Thermom- eter.	Humidity of the atmos- phere (com- plete satura- tion equal- ing 100).	Date.	Barometer.	Thermom- eter.	Humidity of the atmos- phere (com- plete satura- tion equal- ing 100).
1877.	<i>Inches.</i>	<i>Fahr.</i>	<i>0 to 100.</i>	1878.	<i>Inches.</i>	<i>Fahr.</i>	<i>0 to 100.</i>
Nov. 20	29.443	39.0	84	Feb. 2	30.494	38.0	75
21	29.642	39.0	86	3	30.502	41.0	74
22	29.839	45.6	79	4	30.549	40.2	83
23	29.372	44.0	81	5	30.604	39.4	81
24	29.469	35.0	96	6	30.503	34.6	86
25	29.796	35.0	79	7	30.564	36.7	79
26	29.873	39.0	86	8	30.530	30.7	72
27	29.119	44.0	84	9	30.294	32.6	82
28	29.136	39.4	81	10	29.983	35.3	84
29	28.639	41.5	90	11	29.973	34.1	78
30	28.931	39.7	88	12	30.174	36.4	91
Dec. 1	29.211	41.4	88	13	29.847	38.2	98
2	30.107	43.0	95	14	29.897	37.0	98
3	30.808	44.0	92	15	29.989	42.0	86
4	30.089	41.6	95	16	30.100	45.9	80
5	30.017	41.8	90	17	30.076	50.0	78
6	29.438	42.1	92	18	29.960	45.0	85
7	29.842	40.0	89	19	30.330	43.0	84
8	29.986	42.0	91	20	30.058	47.2	83
9	30.244	42.8	84	21	30.467	46.2	86
10	29.975	42.0	91	22	30.584	47.0	79
11	29.989	39.0	92	23	30.387	44.6	68
12	29.915	44.5	84	24	30.250	45.2	84
13	29.750	37.0	97	25	30.036	42.6	81
14	30.178	36.8	91	26	30.033	44.6	87
15	30.391	39.6	93	27	29.745	47.0	92
16	30.176	46.8	93	28	29.794	50.2	80
17	30.278	45.0	85	Mar. 1	29.477	53.0	86
18	30.528	41.7	84	2	29.810	46.4	83
19	30.533	42.0	87	3	30.302	49.0	77
20	34.685	33.0	99	4	30.301	47.6	89
21	30.466	46.4	94	5	30.360	45.0	73
22	30.089	48.8	87	6	29.862	50.0	85
23	30.101	39.0	77	7	29.981	49.0	86
24	29.525	43.0	74	8	29.926	42.0	66
25	29.736	32.0	97	9	30.186	33.4	75
26	29.174	33.3	93	10	29.929	45.6	79
27	29.496	31.5	99	11	30.157	46.6	82
28	29.949	33.0	93	12	30.319	40.3	63
29	29.445	43.6	98	13	30.424	36.6	70
30	29.605	47.3	84	14	30.508	38.3	71
31	29.983	38.3	74	15	30.471	38.0	81
1878.				16	30.660	37.4	78
Jan. 1	30.266	40.0	90	17	30.518	47.0	63
2	30.539	44.0	90	18	30.279	48.6	80
3	30.056	47.0	86	19	30.310	48.8	74
4	29.989	46.7	95	20	30.378	47.0	75
5	30.178	43.6	94	21	30.245	47.3	77
6	30.014	45.0	81	22	30.026	38.0	60
7	29.386	38.6	86	23	29.742	33.3	80
8	29.982	37.7	91	24	29.528	36.3	80
9	30.268	35.4	94	25	29.789	36.2	81
10	30.346	34.4	80	26	30.021	36.0	62
11	30.528	34.0	97	27	29.801	36.0	76
12	30.620	37.3	89	28	29.742	33.4	85
13	30.372	42.8	84	29	29.302	37.0	75
14	30.225	47.2	90	30	29.370	35.6	84
15	30.181	49.6	89	31	29.363	35.6	71
16	30.061	47.7	88	Apr. 1	29.990	37.0	98
17	30.370	41.0	84	2	29.094	41.0	94
18	30.491	38.0	91	3	29.436	42.0	76
19	30.433	43.0	78	4	29.697	39.2	82
20	30.193	47.0	86	5	29.718	38.2	91
21	29.957	49.8	99	6	30.115	39.5	85
22	29.917	41.7	76	7	30.227	37.6	96
23	29.572	38.0	75	8	30.047	46.0	65
24	29.393	36.0	84	9	30.123	44.0	66
25	29.406	28.3	75	10	30.093	43.3	85
26	30.000	35.0	80	11	30.131	47.0	93
27	30.137	37.8	89	12	30.208	44.5	86
28	29.653	37.8	85	13	29.988	48.7	70
29	30.052	34.6	84	14	29.931	55.3	69
30	30.352	29.4	73	15	29.919	55.6	72
31	30.552	34.4	85	16	29.797	53.0	72
Feb. 1	30.548	32.3	91	17	29.657	53.3	73

*Meteorological report from July 1, 1877, to June 30, 1879—Continued.*

Date.	Barometer.	Thermom- eter.	Humidity of the atmos- phere (com- plete satura- tion equal- ing 100).	Date.	Barometer.	Thermom- eter.	Humidity of the atmos- phere (com- plete satura- tion equal- ing 100).
1878.	<i>Inches.</i>	<i>Fahr.</i>	0 to 100.	1878.	<i>Inches.</i>	<i>Fahr.</i>	0 to 100.
Apr. 18	29.757	45.4	80	July 2	29.917	54.8	68
19	29.677	46.8	92	3	29.928	56.8	63
20	29.473	51.2	96	4	30.085	50.8	63
21	29.633	50.8	81	5	29.950	53.0	72
22	29.899	46.0	67	6	29.830	54.6	95
23	29.734	48.0	92	7	29.976	53.0	76
24	29.797	48.9	83	8	30.104	61.2	61
25	29.974	48.6	75	9	30.006	62.7	64
26	30.120	45.2	79	10	29.857	58.0	76
27	30.270	44.0	82	11	29.797	59.7	71
28	30.207	46.4	70	12	29.870	60.7	60
29	29.996	51.0	90	13	29.992	58.3	73
30	29.661	47.0	95	14	30.109	59.7	67
May 1	29.624	50.6	85	15	30.200	61.0	75
2	29.846	55.0	71	16	30.257	65.0	72
3	29.968	54.6	70	17	30.298	66.0	76
4	29.997	52.1	61	18	30.347	69.3	74
5	30.081	56.9	69	19	30.291	72.0	58
6	29.814	57.2	90	20	30.129	76.0	57
7	29.095	53.4	86	21	30.084	74.0	58
8	29.724	46.3	74	22	30.122	67.4	77
9	29.954	45.6	88	23	30.069	61.6	73
10	29.852	51.6	88	24	29.782	59.7	87
11	29.631	50.0	59	25	29.678	60.0	90
12	29.630	61.7	59	26	29.739	62.0	82
13	29.492	55.7	93	27	29.899	57.2	84
14	29.882	57.6	83	28	29.981	62.0	53
15	29.315	52.0	73	29	30.058	55.5	73
16	29.666	56.0	72	30	30.231	60.5	63
17	29.664	56.6	99	31	30.401	58.0	74
18	29.722	57.7	90	Aug. 1	30.245	58.0	79
19	29.609	53.6	58	2	30.125	62.0	75
20	29.754	53.4	79	3	29.893	59.8	83
21	29.761	45.0	66	4	29.798	63.0	80
22	29.949	49.0	93	5	29.908	61.5	78
23	29.447	47.0	66	6	29.785	60.0	80
24	29.295	49.7	66	7	29.738	60.8	89
25	29.598	52.0	69	8	29.968	64.6	71
26	29.797	52.0	67	9	30.125	64.8	53
27	29.821	54.0	70	10	29.702	60.6	90
28	29.839	55.0	84	11	29.805	62.7	74
29	30.060	50.0	61	12	29.456	61.4	92
30	30.161	53.4	76	13	29.534	61.7	73
June 1	30.028	52.8	89	14	29.423	58.4	84
2	30.165	51.6	69	15	29.529	60.4	86
3	29.990	56.0	90	16	29.506	60.4	80
4	29.888	50.2	93	17	29.778	57.2	67
5	29.759	50.0	71	18	29.888	64.2	61
6	30.031	49.9	72	19	29.982	63.0	69
7	30.199	55.4	67	20	29.999	59.0	65
8	30.092	58.7	87	21	30.062	61.8	66
9	29.778	63.2	64	22	30.042	57.0	79
10	29.488	61.7	76	23	29.752	56.8	85
11	29.567	55.6	91	24	29.494	57.7	86
12	29.468	52.8	82	25	29.475	62.0	80
13	29.371	53.0	71	26	29.514	60.4	69
14	29.676	50.2	72	27	29.594	64.7	73
15	29.909	50.0	69	28	29.690	61.6	74
16	29.879	52.0	70	29	29.710	59.2	83
17	29.805	53.0	69	30	29.341	62.4	73
18	29.818	57.6	57	31	29.564	60.4	83
19	29.886	58.6	56	Sept. 1	30.008	59.7	84
20	29.984	57.7	72	2	30.231	57.4	75
21	30.051	59.4	77	3	30.169	62.0	77
22	30.056	58.0	67	4	30.178	60.5	87
23	30.205	61.7	67	5	30.054	59.6	92
24	30.090	66.8	70	6	30.070	62.4	78
25	30.044	67.4	66	7	30.144	64.9	74
26	30.174	68.0	57	8	30.054	58.4	96
27	30.180	73.9	65	9	29.937	61.2	79
28	30.114	76.9	67	10	30.234	57.3	56
29	30.017	72.0	70	11	30.247	60.8	60
30	29.982	66.7	81	12	29.990	58.7	81
July 1	29.921	59.9	70	13	30.097	58.3	78
	29.986	55.1	70	14	29.931	57.4	62

*Meteorological report from July 1, 1877, to June 30, 1879—Continued.*

Date.	Barometer.	Thermom-eter.	Humidity of the atmos-phere (com-plete satura-tion equal-ing 100).	Date.	Barometer.	Thermom-eter.	Humidity of the atmos-phere (com-plete satura-tion equal-ing 100).
1878.	<i>Inches.</i>	<i>Fahr.</i>	0 to 100.	1878.	<i>Inches.</i>	<i>Fahr.</i>	0 to 100.
Sept. 15	29.586	60.0	74	Nov. 29	29.587	32.0	79
16	29.555	54.0	63	30	29.588	36.0	88
17	29.793	60.4	88	1	29.620	40.4	88
18	29.587	56.3	68	2	30.089	39.0	86
19	29.725	51.1	76	3	30.196	36.8	92
20	29.902	50.0	84	4	30.328	34.4	85
21	30.153	51.0	78	5	30.076	39.6	92
22	29.847	51.8	78	6	30.063	32.8	82
23	29.359	51.7	79	7	29.711	36.2	74
24	29.638	48.0	88	8	29.439	32.7	85
25	29.515	52.0	79	9	29.623	29.2	65
26	29.845	51.8	72	10	29.853	31.0	79
27	29.959	53.6	92	11	29.835	32.4	96
28	30.039	57.4	91	12	29.718	30.4	79
29	30.017	60.0	86	13	29.669	20.8	99
30	29.548	54.8	84	14	29.699	19.0	99
Oct. 1	30.055	45.4	87	15	29.580	32.0	92
2	30.304	43.8	86	16	29.465	30.7	90
3	30.113	55.4	86	17	29.501	28.4	93
4	30.111	51.5	90	18	29.286	34.6	78
5	30.060	60.0	90	19	29.094	34.0	82
6	29.696	58.4	83	20	29.484	24.0	97
7	29.458	60.0	84	21	29.795	30.0	83
8	29.240	59.0	81	22	29.694	27.7	82
9	29.422	56.5	78	23	29.774	27.0	95
10	29.994	57.2	81	24	30.307	27.2	96
11	29.678	50.7	77	25	30.106	17.4	99
12	30.219	52.4	83	26	29.428	31.8	94
13	30.212	53.4	73	27	29.468	35.0	90
14	30.148	48.3	86	28	29.516	37.2	87
15	30.063	51.0	88	29	29.340	38.6	93
16	30.097	52.0	93	30	29.240	47.0	85
17	29.994	52.6	85	31	29.213	48.9	82
18	29.942	49.4	95	1879.			
19	29.818	53.5	89	Jan. 1	29.728	38.6	89
20	29.798	52.0	91	2	29.936	31.2	83
21	29.400	55.6	80	3	29.510	29.0	82
22	29.065	46.4	79	4	29.680	30.0	77
23	29.333	44.4	85	5	30.061	32.6	82
24	29.333	47.0	88	6	30.240	27.4	96
25	29.114	44.8	86	7	30.087	33.4	76
26	29.050	40.8	94	8	29.780	29.4	81
27	29.492	44.0	80	9	30.127	33.0	81
28	29.616	40.6	90	10	29.756	28.6	79
29	29.769	39.8	77	11	29.686	26.4	96
30	29.601	39.6	81	12	30.044	26.2	73
Nov. 1	29.883	42.3	83	13	29.881	41.4	88
2	30.035	41.2	82	14	29.798	40.4	97
3	30.208	41.7	85	15	29.492	41.0	89
4	30.203	42.0	82	16	29.962	30.0	94
5	29.808	37.3	84	17	30.244	34.6	84
6	29.911	40.7	83	18	29.948	33.8	96
7	29.554	39.0	67	19	30.399	33.0	89
8	29.748	39.0	77	20	30.206	28.4	70
9	30.339	40.2	90	21	30.404	30.1	92
10	30.129	35.0	85	22	30.160	27.0	82
11	29.257	44.4	91	23	30.162	27.7	86
12	29.429	39.0	74	24	30.110	29.0	76
13	29.278	36.2	72	25	30.176	30.8	88
14	29.521	37.0	86	26	30.277	28.7	62
15	29.720	39.6	83	27	30.367	30.2	90
16	29.385	40.0	90	28	30.401	24.3	81
17	29.268	41.0	83	29	30.361	31.0	85
18	29.596	43.0	83	30	30.382	32.4	75
19	30.095	42.7	89	31	30.337	31.4	83
20	30.460	40.4	83	Feb. 1	30.093	30.2	86
21	30.372	33.4	95	2	29.807	31.3	75
22	30.192	32.7	98	3	29.486	34.7	93
23	30.028	34.7	90	4	30.034	34.0	86
24	29.974	39.7	92	5	29.769	35.6	80
25	29.612	34.9	94	6	29.252	42.3	96
26	29.303	39.0	92	7	29.208	45.4	97
27	29.490	32.5	96	8	29.341	41.4	85
28	29.490	36.6	92	9	29.193	42.6	81
29	29.700	38.8	73	10	29.935	46.7	78



*Meteorological report from July 1, 1877, to June 30, 1879—Continued.*

Date.	Barometer.	Thermometer.	Humidity of the atmosphere (complete saturation equaling 100).	Date.	Barometer.	Thermometer.	Humidity of the atmosphere (complete saturation equaling 100).
1879.	<i>Inches.</i>	<i>Fahr.</i>	<i>0 to 100.</i>	1879.	<i>Inches.</i>	<i>Fahr.</i>	<i>0 to 100.</i>
Feb. 11	28.962	41.3	86	April 22	29.568	40.4	82
12	29.668	36.8	85	23	29.488	40.4	94
13	29.761	36.4	91	24	29.838	39.7	90
14	29.546	37.7	90	25	30.004	47.2	78
15	29.626	36.0	98	26	29.627	49.3	80
16	29.094	36.2	97	27	29.741	43.4	88
17	28.986	34.6	94	28	30.104	43.5	89
18	29.182	33.0	91	29	30.324	38.8	68
19	29.316	34.7	95	30	30.261	39.3	66
20	29.072	33.8	96	May 1	30.201	40.6	72
21	29.226	33.0	91	2	30.430	43.4	65
22	29.371	31.4	95	3	30.453	45.2	65
23	29.528	32.4	90	4	30.530	45.7	74
24	29.733	34.0	94	5	30.486	53.7	62
25	30.189	31.7	92	6	30.153	44.0	59
26	30.179	34.2	83	7	30.120	39.3	69
27	29.925	41.5	94	8	30.024	43.3	52
28	29.680	43.0	94	9	29.779	43.6	73
Mar. 1	30.109	36.7	84	10	30.032	41.1	63
2	30.036	37.2	83	11	29.902	41.9	86
3	29.763	38.8	91	12	30.107	50.7	64
4	29.854	41.7	92	13	30.052	51.9	71
5	29.780	50.1	81	14	29.829	49.5	80
6	30.096	41.6	83	15	29.956	44.6	76
7	30.447	44.0	90	16	30.181	47.0	78
8	30.550	33.4	88	17	29.993	45.5	90
9	30.324	46.4	75	18	29.700	48.0	89
10	30.281	43.6	78	19	29.900	45.4	89
11	30.308	39.5	80	20	29.046	55.2	79
12	29.790	47.0	90	21	30.086	57.2	76
13	30.340	35.0	62	22	30.048	55.4	70
14	30.214	30.6	76	23	30.162	50.6	67
15	29.644	41.2	83	24	30.141	52.8	78
16	29.654	37.4	92	25	29.839	53.5	62
17	30.109	34.6	88	26	29.832	50.6	80
18	29.853	42.3	96	27	29.685	50.4	62
19	29.789	41.0	97	28	29.725	47.0	97
20	29.943	40.6	92	29	29.620	49.8	86
21	29.526	39.4	86	30	29.726	54.8	85
22	29.992	34.0	89	31	29.643	57.4	85
23	30.076	35.0	82	June 1	29.501	44.0	93
24	30.047	32.0	67	2	29.620	50.6	81
25	29.978	31.7	76	3	29.574	48.0	78
26	29.793	31.2	78	4	29.765	48.9	74
27	29.705	32.0	94	5	29.896	55.8	63
28	29.707	33.8	88	6	29.756	65.4	71
29	29.537	44.0	89	7	29.747	49.7	90
30	29.572	45.7	71	8	29.545	59.7	75
April 1	29.549	44.6	78	9	29.671	58.1	77
2	29.612	45.0	81	10	29.982	56.5	82
3	29.610	43.4	84	11	30.039	58.3	74
4	29.606	38.0	85	12	29.943	55.7	82
5	29.744	42.7	79	13	30.131	53.2	86
6	29.696	48.4	72	14	30.099	56.3	83
7	29.418	48.5	88	15	29.846	61.7	72
8	29.961	43.7	85	16	29.619	61.9	76
9	29.166	49.4	82	17	29.490	59.4	84
10	29.538	40.4	92	18	29.745	54.5	83
11	29.904	37.7	85	19	29.842	61.1	62
12	30.218	36.0	68	20	29.661	60.4	69
13	29.906	36.4	81	21	29.608	55.3	86
14	29.738	33.7	85	22	29.618	56.5	82
15	29.746	39.2	74	23	29.793	55.9	72
16	29.601	37.6	86	24	29.505	55.1	73
17	29.556	38.0	96	25	29.519	54.9	65
18	29.618	40.0	72	26	29.654	56.8	67
19	29.924	41.0	73	27	29.656	59.3	98
20	29.893	40.3	76	28	29.642	62.1	56
21	29.474	42.1	88	29	29.848	61.4	65
	29.666	40.6	75	30	29.926	57.2	68

C. O. SHEPARD,  
Consul.

UNITED STATES CONSULATE,  
Bradford, August 20, 1880.

## BRISTOL.

## THE RAINFALL AT BRISTOL.

Dr. George Burder, of this city, reports his observations as follows:

In the month of June just ended the rainfall at Bristol amounted to 5.145 inches, being more than double the average. Only 4 days out of the 30 were entirely without rain. In 27 years there has been but one other example of so wet a June. In June, 1860, the downfall was 7.104 inches. From the beginning of the present year every month but March has had an excess of rain, but in neither of the previous months was the quantity so large as it has been in June. The total excess in the six months has been nearly six inches. This excess, noteworthy in itself, appears far more remarkable when taken in connection with the weather of previous years. In each of the five years preceding the present; that is, from 1874 to 1878, the rain had been in excess of the average. In 1873 there was a small deficiency. In 1872 there was a very large excess. Speaking broadly, therefore, the rainy period which we are now experiencing may be said to have lasted for  $7\frac{1}{4}$  years, during which time the aggregate excess has been no less than 45.106 inches—a quantity more than equivalent to the rainfall of 16 average months. From this it obviously follows that if no more rain were to fall until the autumn of 1880 the balance would be only just restored.

*Observations for 1879.*

Months.	Average of 25 years.	1879.	Departure from av- erage.
	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>
January .....	3.462	4.307	+0.845
February .....	2.120	3.921	+1.801
March .....	2.247	1.102	-1.145
April .....	2.057	2.863	+0.806
May .....	2.284	3.218	+0.934
June .....	2.441	5.145	+2.704
July .....	2.783	3.669	+0.886
August .....	3.404	7.319	+3.915
September .....	3.414	3.906	+0.492

Mr. T. W. Huthwaite's observations, from January 1 to June 30, 1879, inclusive, show that 21.46 inches of rain have fallen in the first six months of this year, and on 104 days in this period it has rained.

	<i>Inches.</i>		<i>Inches.</i>
January 1 .....	1.42	Feb'y 12 .....	0.10
2 .....	0.52	13 .....	0.15
3 .....	0.17	14 .....	0.18
6 .....	0.11	15 .....	0.16
7 .....	1.25	16 .....	0.11
12 .....	0.07	17 .....	0.02
13 .....	0.02	18 .....	0.03
14 .....	0.61	19 .....	0.10
17 .....	0.42	20 .....	0.74
		21 .....	0.03
9 days .....	4.59	22 .....	0.10
		24 .....	0.07
February 1 .....	0.34	25 .....	0.01
2 .....	0.07	26 .....	0.01
3 .....	0.02	28 .....	0.33
5 .....	0.09		
6 .....	0.18	25 days .....	4.18
7 .....	0.18		
8 .....	0.40	March 2 .....	0.05
9 .....	0.14	3 .....	0.02
10 .....	0.55	4 .....	0.03
11 .....	0.07	5 .....	0.12

		Inches.			Inches.
March	6	0.01	May	18	0.15
	11	0.04		20	0.01
	14	0.22		22	0.20
	15	0.04		24	0.15
	16	0.04		26	0.25
	17	0.01		27	0.70
	19	0.01		28	1.02
	22	0.06		29	0.02
	28	0.19		30	0.03
	29	0.03			
	30	0.27			
15 days		1.14	15 days		3.23
April	2	0.26	June	1	0.01
	5	0.27		2	0.37
	6	0.50		5	0.45
	9	0.12		6	0.21
	12	0.24		7	0.30
	14	0.35		8	0.06
	19	0.15		9	0.47
	22	0.27		10	0.10
	23	0.31		11	0.36
	24	0.08		12	0.11
	25	0.15		14	0.36
	26	0.11		15	0.26
	27	0.11		16	0.28
	29	0.02		17	0.02
14 days		2.94		19	0.13
May	1	0.08		20	0.08
	5	0.10		21	0.02
	9	0.07		23	0.04
	11	0.06		25	0.09
	12	0.05		26	0.20
	13	0.12		27	0.08
	14	0.14		27	0.51
	15	0.01		29	0.11
	17	0.06		30	0.77
			24 days		5.39
			Total for the six months		21.46

The rainfall in London for the first six months of last year was 9.49 inches, so that we have had here this year an excess over last year of nearly an inch. An inch of rain means a gallon of water spread over a surface of nearly 2 square feet, or a fall of 100 tons 16 cwt.

THEODORE CANISIUS, *Consul*.

UNITED STATES CONSULATE,  
Bristol, July 8, 1879.

### CARDIFF.

Table of mean degrees of humidity for each month from July 1, 1878, to June 30, 1879.

1878.	Saturation
July	70
August	73
September	76
October	82
November	84
December	87

Table of mean degree of humidity, &amp;c.—Continued.

1879.	Saturation 100.
January .....	81
February .....	86
March .....	79
April .....	77
May .....	69
June .....	78
Mean of the twelve months .....	79

W. WIRT SIKES, *Consul.*UNITED STATES CONSULATE,  
*Cardiff, October 16, 1879.*

## DUNDEE.

## RAINFALL AND TEMPERATURE IN DUNDEE.

A circular was received by this office from the Department, dated April 3, 1879, instructing me to embrace in my annual report a table showing the humidity of each month of the year in my consular district. The following tables furnish this information, together with the temperature prevailing.

MATTHEW MCDUGALL, *Consul.*UNITED STATES CONSULATE,  
*Dundee, November 20, 1879.**Rainfall, &c., at Dundee for the year ending September 30, 1879.*[Diameter of funnel, 3 inches; height of top above ground,  $4\frac{1}{2}$  inches; height above sea-level, 167 feet.]

Months.	Total depth.	Greatest fall in 24 hours.		Number of days on which 0.1 inch or more fell.	Hours of sunshine.	Self-registering thermometer, average.	
		Depth.	Date.			Max.	Min.
	<i>Inches.</i>	<i>Inches.</i>					
October .....	2.60	0.85	Oct. 30	14	89	57	43
November .....	1.75	0.35	Nov. 24	13	69	43	33
December .....	2.60	0.50	Dec. 28	13	46	36	26
January .....	2.05	0.55	Jan. 12	13	38	36	26
February .....	3.70	1.10	Feb. 16	18	32	38	29
March .....	3.05	0.80	Mar. 15	14	67	43	32
April .....	2.60	0.90	Apr. 8	10	81	47	34
May .....	2.25	0.80	May 30	13	128	56	48
June .....	4.75	1.20	June 7	18	108	61	46
July .....	3.95	0.85	July 8	14	122	64	49
August .....	4.25	0.80	Aug. 5	19	134	65	58
September .....	2.25	0.50	Sept. 30	11	103	61	45
Total .....	35.80			170	1,031		

NOTE.—The peculiarities of the year have been marked for the excessive rainfall and deficiency of sunshine; notwithstanding this, the grain crops are above the average in this neighborhood, and the green under the average, and all the crops about 29 days late.

*Rainfall in Dundee during each month of the past ten years.*

Months.	1860.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	Av. 10 years.
	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>	<i>In.</i>
January .....	4.00	1.70	0.90	3.75	2.80	2.10	4.15	0.95	4.30	1.75	2.64
February .....	1.25	2.10	4.20	6.15	0.80	0.75	1.50	3.20	1.55	1.60	2.31
March .....	0.80	0.80	0.75	2.65	1.90	0.95	1.80	2.40	2.50	0.80	1.53
April .....	1.55	0.30	6.10	1.70	0.10	0.80	0.65	4.30	2.65	2.00	2.01
May .....	0.85	1.15	0.85	2.85	3.30	2.75	0.85	0.40	2.40	2.00	1.80
June .....	2.60	1.55	1.80	4.30	1.25	0.75	3.55	3.15	2.70	2.80	2.44
July .....	0.95	1.25	3.00	2.15	5.10	2.70	2.35	1.80	4.60	1.00	2.49
August .....	0.95	1.40	1.75	2.70	3.00	5.55	1.45	2.40	7.05	3.15	2.94
September .....	6.05	2.65	1.95	4.65	3.70	1.90	3.40	4.15	1.90	2.85	3.32
October .....	2.95	3.15	3.50	3.00	2.70	2.30	5.90	4.15	3.70	2.60	3.39
November .....	0.80	1.85	2.60	4.70	1.90	2.60	4.70	6.45	2.85	1.75	3.02
December .....	1.90	4.25	1.25	4.20	1.85	2.20	1.55	11.20	2.75	2.55	3.41
Total .....	24.65	22.15	28.65	42.80	28.40	25.35	31.85	44.55	38.95	25.45	31.30

*Days in which no sun appeared in Dundee in 1879.*

Months.	Days.	Months.	Days.
January .....	20	June .....	13
February .....	17	July .....	12
March .....	19	August .....	16
April .....	13	September .....	3
May .....	16		

## GLASGOW.

*Results of meteorological observations at the observatory of Glasgow University during the year ending September 30, 1879.*

[Extracted from the records of the observatory.]

Months.	Barometer.			Thermometer.			Rain.	
	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	No. of days it fell.	Amount.
1878.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	°	°	°		<i>Inches.</i>
October .....	29.634	30.206	28.580	50.0	63.0	34.0	10	4.18
November .....	29.143	30.426	28.432	39.7	47.5	28.2	9	1.63
December .....	29.497	30.654	28.491	31.6	48.9	10.9	2	1.89
1879.								
January .....	29.998	30.598	29.578	31.3	45.2	17.8	12	1.11
February .....	29.442	30.313	28.579	35.5	48.0	25.1	18	1.70
March .....	29.863	30.549	29.333	37.7	52.0	21.5	16	3.85
April .....	29.878	30.683	29.347	42.1	54.2	30.4	12	1.62
May .....	29.674	30.435	29.339	46.6	61.6	31.4	14	2.61
June .....	29.888	30.105	29.448	53.3	68.0	39.8	22	5.91
July .....	29.719	30.086	29.061	55.0	71.7	47.6	21	4.74
August .....	29.717	30.111	28.988	55.8	71.3	42.5	18	5.32
September .....	29.767	30.311	29.216	51.8	58.8	46.4	16	4.02
Mean barometer .....	29.685							
Mean temperature .....				44.2				
Number of days and amount of rain .....							170	38.58

UNITED STATES CONSULATE,  
Glasgow, November 24, 1879.

SAMUEL F. COOPER, *Consul.*

## GREENWICH.

In compliance with the instructions of a circular from the State Department, of April 3, 1879, the following table of humidity is submitted.

ADAM BADEAU,  
*Consul-General.*

UNITED STATES CONSULATE-GENERAL,  
*London, November 20, 1879.*

ROYAL OBSERVATORY, GREENWICH.

[Sir GEORGE BIDDELL AIRY, K. C. B., LL. D., D. C. L., &c., astronomer royal.]

*Mean relative humidity for each month of the year ending September, 1879.*

	Mean relative humidity (complete saturation = 100).
1878.	
October.....	83
November.....	88
December.....	0
1879.	
January.....	82
February.....	87
March.....	90
April.....	81
May.....	75
June.....	81
July.....	85
August.....	85
September.....	84

WILLIAM ELLIS,  
*For the Astronomer Royal.*

NOVEMBER 17, 1879.

## NOTTINGHAM.

*Mean degree of humidity at Nottingham for each month from July, 1878, to June, 1879, inclusive.*

	Mean degree of humidity.
1878.	
July.....	78
August.....	85
September.....	88
October.....	90
November.....	91
December.....	88
1879.	
January.....	88
February.....	94
March.....	92
April.....	87
May.....	85
June.....	88

JASPER SMITH, *Consul.*

UNITED STATES CONSULATE,  
*Nottingham, September 30, 1880.*

## LIVERPOOL.

The following table shows the mean humidity for each month from July, 1878, to June, 1879, inclusive, as deduced from observations taken at the Liverpool Observatory:

	Mean degree of humidity, complete saturation being represented by 100.
1878.	
July .....	85
August .....	86
September .....	80
October .....	84
November .....	92
December .....	88
1879.	
January .....	88
February .....	92
March .....	80
April .....	79
May .....	75
June .....	81

S. B. PACKARD, *Consul.*

UNITED STATES CONSULATE,  
*Liverpool, September 15, 1879.*

## NEWCASTLE.

*Statement, prepared by the librarian of the literary and philosophical society, showing the rainfall at Newcastle-upon-Tyne from October, 1878, to September, 1879, inclusive.*

	Inches.
1878.	
October .....	1. 32
November .....	7. 31
December .....	4. 66
1879.	
January .....	0. 85
February .....	2. 96
March .....	0. 82
April .....	1. 91
May .....	1. 82
June .....	3. 64
July .....	3. 54
August .....	3. 06
September .....	0. 87
Total .....	32. 76

WM. LYALL, *Librarian.*

EVAN R. JONES, *Consul.*

UNITED STATES CONSULATE,  
*Newcastle-upon-Tyne, December 20, 1879.*

## FRANCE.

## BORDEAUX.

*Humidity in millimeters at Bordeaux of each month of the fiscal year ending June 30, 1879.*

1878.	Millimeters.
July .....	17.0
August .....	98.5
September .....	22.5
October .....	92.0
November .....	114.0
December .....	140.5
1879.	
January .....	84.0
February .....	166.5
March .....	21.0
April .....	129.7
May .....	83.0
June .....	48.5

The quantity of rain during the months of October, November, December, January, and February, is almost twice the quantity of the average of the previous 18 years from 1861 to 1878.

B. GERRISH, *Consul.*

UNITED STATES CONSULATE,  
*Bordeaux, September 30, 1879.*

## ROCHEFORT.

*Monthly humidity at Rochefort from June 30, 1878 to June 30, 1879.*

Months.	Humidity.	Rainfall.	Months.	Humidity.	Rainfall.
1878.	Degrees.	Millimeters.	1879.	Degrees.	Millimeters.
July .....	45	28	January .....	92	115
August .....	65	109	February .....	89	157
September .....	75	23	March .....	79	36
October .....	85	101	April .....	69	113
November .....	90	111	May .....	69	67
December .....	93	100	June .....	68	68

Le Directeur de l'Observatoire,

## MARSEILLES.

*Table showing the humidity of each month of the fiscal years 1877-78 and 1878-79, according to observations taken at the observatory at Marseilles.*

Months.	1877.	1878.	Months.	1878.	1879.
	mm.	mm.		mm.	mm.
July .....	2.65	0.10	Brought over .....	109.90	305.75
August .....	13.70	4.80	January .....	2.80	60.10
September .....	17.10	42.95	February .....	0.00	46.55
October .....	36.30	55.60	March .....	22.20	55.50
November .....	23.05	117.55	April .....	53.55	105.80
December .....	16.10	84.75	May .....	53.60	121.35
			June .....	29.80	10.90
Total .....	108.90	305.75	Total .....	270.85	705.95

The above figures express the depth of water, in millimeters, fallen on a surface of a square meter. A millimeter is equal to 0.03937 of an inch; a square meter is equal to 1.196 square yards.

UNITED STATES CONSULATE, *Marseilles, September 30, 1879.*

JOHN B. GOULD.



## NICE.

Table showing the humidity at the city of Nice during the fiscal year ending June 30, 1879.

1878.												
Date.	July.			August.			September.			October.		
	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.
1.	77	67	80	77	82	82				76	75	83
2.	85	71	82	85	90	91	86	85	77	83	84	89
3.	51	41	50	75	84	90	84	82	76	76	69	71
4.	56	53	48	77	83	90	77	58	85	79	61	70
5.	64	52	58	83	88	93	84	62	80	72	70	75
6.	72	65	72	91	92	93	84	84	83			
7.		69		90	90	90	87	96	76	85	69	75
8.	81	77	80	91	71	88	87	81		82	78	86
9.	77	67	82	88	87	90	88	82	90	90	77	73
10.	81	79	88	90	85	90	59	55	86	80	74	90
11.	83	67	74	92	88		83	71	69	80	77	84
12.	77	67	77	87	87	90	35	71	69	78	68	77
13.	76	77	84	90	78	88	69	67	61			
14.				88	88	93	74	68	69	79	67	74
15.	82	83	85	92	87	92				80	78	80
16.	85	79	88	90	89	92	72	65	68	77	70	75
17.	73	70	82	80	78	88	77	78	83	82	79	78
18.	79	73	83	85	86		81	74	81	76	87	83
19.	84	81	85	81	80	84	75	74	78	74	70	78
20.	83	83	84	87	84	90	74	69	74	81	71	84
21.				90	85	90	73	65	73	84	76	83
22.	64	69	86	88	87	88	67	51	60	82	83	84
23.	74	73	86	85	82	90	57	50	76	81	45	56
24.	88	74	82	83	45	79	63	68	73	66	69	80
25.	83	74	84		79		69	89	72	89	87	94
26.	67	69	74		77	90	55	73	77	73	59	59
27.	74	75	83	90	92	97	68	62	76	75	83	85
28.				82	85	90	81	77	85	71	61	67
29.	86	87	93	82	70	90				63	52	48
30.	77	82	85	87	78	88	88	75	83	76	55	54
31.	83	87	88	88	81	95				85	48	57

Date.	1878.						1879.					
	November.			December.			January.			February.		
	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.
1	76	57	78	89	70	88	86	85	93	86	71	74
2	89	73	70	88	83	63	81	63	78	70	75	86
3	76	57	78	57	58	66	71	73	86	84	80	86
4	54	53	63	88	71	70	71	62	59	84	86	87
5	84	63	69	77	62	79	64	48	84	86	88	83
6	71	54	35	77	65	66	83	52	71	79	83	86
7	76	43	60	66	66	71	87	62	74	79	83	85
8	52	52	60	69	75	81	84	60	75	76	83	86
9	41	26	32	59	38	49	88	82	84	82	88	86
10	73	35	74	60	49	66	84	62	81	90	89	90
11	63	68	74	93	80	76	78	76	77	93	67	71
12	79	55	74	54	51	67	79	62	83	71	75	83
13	75	78	81	59	73	80	85	44	70	83	80	80
14	61	50	73	66	61	71	73	81	70	89	81	80
15	63	54	56	65	36	62	65	50	83	86	83	86
16	86	84	81	41	48	61	69	69	76	81	71	76
17	69	63	79	87	81	77	72	59	76	82	62	72
18	86	83	76	64	50	74	74	66	72	77	48	50
19	86	59	61	71	73	82	74	71	85	74		54
20	78	59	80	89	84	84	67	55	77	76	54	84
21	86	78	76	80	61	58	73	85	82	63	60	71
22	81	72	72	62	63	81	83	72	79	84	72	80
23	83	71	81	69	51	54	68	81	85	89	69	67
24	77	62	73	85	65	82	67	64	76	63	87	70
25	61	74	86	75	82	83	72	60	68	91	77	75
26	84	88	86	75	82	83	72	93	84	84	83	67
27	77	77	87	91	73	81	84	75	86	61	73	61
28	91	84	87	86	86	79	93	70	78	62	61	65
29	90	71	83	84	86	84	86	74	82			
30	66	54	79	86	83	90	70	75	81			
31				90	86	90	71	63	89			

Table showing the humidity at the city of Nice, &amp;c.—Continued.

Date.	1879.											
	March.			April.			May.			June.		
	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.	9 a. m.	Noon.	6 p. m.
1.	66	52	72	72	67	76	58	89	74	83	68	75
2.	76	75	86	91	95	78	84	86	73	76	71	77
3.	70	67	84	70	80	73	73	86	75	84	79	82
4.	89	73	82	83	86	86	72	86	76	73	75	81
5.	71	69	80	79	74	72	67	64	70	74	56	40
6.	72	66	80	75	82	84	80	68	71	83	85	85
7.	80	69	80	90	90	81	76	69	75	86	80	83
8.	75	68	78	86	72	81	76	76	72	77	73	82
9.	69	70	86	93	70	83	81	73	63	76	75	83
10.	80	69	74	78	76	79	72	81	71	85	74	88
11.	78	80	81	71	84	84	78	83	78	80	79	83
12.	83	82	86	80	83	78	75	79	77	81	76	80
13.	78	78	83	78	75	81	83	69	66	88	62	48
14.	74	68	71	85	86	86	73	71	68	72	69	66
15.	48	64	69	81	80	88	71	71	85	70	60	84
16.	82	78	82	86	86	85	67	67	56	75	78	59
17.	79	60	81	59	53	76	86	85	69	69	48	45
18.	74	70	69	45	52	67	70	63	72	72	64	66
19.	72	69	81	72	69	69	76	78	75	82	74	77
20.	81	79	86	71	87	83	86	81	74	78	84	87
21.	90	80	77	87	86	82	77	71	78	75	74	84
22.	65	78	86	79	65	80	74	75	87	74	76	84
23.	81	68	86	82	82	84	87	84	83	79	76	84
24.	74	80	86	80	85	75	80	84	83	78	76	67
25.	86	85	77	78	70	62	67	64	86	78	80	81
26.	87	75	83	66	70	80	87	89	89	69	61	68
27.	78	74	86	74	73	79	91	73	98	75	71	79
28.	89	80	90	73	70	82	66	84	85	76	79	82
29.	81	76	75	86	76	76	76	83	85	79	82	81
30.	82	76	78	78	62	76	79	87	67	67	70	79
31.	84	76	84				78	77	73			

W. H. VESEY, Consul.

CONSULATE OF THE UNITED STATES,  
Nice, October 1, 1879.

## PARIS.

Statement showing the number of days of rain and the amount thereof at Paris during each month of the year ended June 30, 1879.

Months.	Number of days.	Height in—	
		Milli-meters.	Inches.
1878.			
July.....	11	52.7	2. +
August.....	22	93.7	3. +
September.....	9	16.0	0.6 +
October.....	18	116.5	4. +
November.....	25	78.8	3. +
December.....	19	60.5	2. +
1879.			
January.....	12	69.0	2. +
February.....	18	53.4	2. +
March.....	12	27.5	1. +
April.....	22	98.7	3. +
May.....	15	56.1	2. +
June.....	19	49.8	1. +
4 Total.....	202	772.7	30.394

LUCIUS FAIRCHILD,  
Consul-General.UNITED STATES CONSULATE-GENERAL,  
Paris, September 30, 1880.

## WEST OF FRANCE.

Statement showing the rainfall in millimeters and the number of rainy days at six meteorological stations in the West of France for each of the twelve months from July, 1878, to July 1879, the first inclusive.

Months.	METEOROLOGICAL STATIONS.											
	Nantes.		Lorient.		Angers.		Tours.		Le Mans.		Roche-sur-Yon.	
	Rainfall.	Rainy days.	Rainfall.	Rainy days.	Rainfall.	Rainy days.	Rainfall.	Rainy days.	Rainfall.	Rainy days.	Rainfall.	Rainy days.
July .....	41.7	12	45.0	11	34.7	12	33.7	15	24.0	11	22.1	10
August .....	105.9	23	110.5	22	106.7	19	115.4	22	157.4	20	*	*
September .....	22.2	12	35.3	10	15.0	8	8.4	5	29.0	8	*	*
October .....	76.8	19	115.8	20	93.2	19	74.1	16	123.8	15	91.6	13
November .....	63.6	22	43.5	21	60.2	21	100.3	18	76.7	20	86.8	19
December .....	57.7	13	95.5	21	89.5	17	87.7	24	106.0	21	67.3	16
January .....	156.7	20	200.3	18	157.5	24	128.1	17	84.8	17	101.3	15
February .....	137.8	23	160.2	26	112.0	24	137.9	21	95.6	23	109.6	19
March .....	18.9	14	37.8	15	18.9	10	34.5	13	27.3	8	28.9	11
April .....	133.5	22	92.4	19	90.5	19	80.0	22	84.9	20	82.1	16
May .....	47.4	25	100.9	19	99.1	17	41.1	16	41.0	13	71.9	14
June .....	102.2	21	68.3	22	98.4	18	50.7	19	79.0	16	72.4	19
Total .....	964.1	226	1,105.5	224	975.7	208	891.9	208	929.7	192	.....	.....

\* No record.

GEORGE GIFFORD,  
Commercial Agent.

UNITED STATES COMMERCIAL AGENCY,  
Nantes, September 20, 1879.

## SWITZERLAND.

## BERNE.

With reference to the department circular of April 3, 1879, I have the honor to transmit herewith two letters in German, with translations thereof, from the "*Tellurische Observatorium*" at Berne, and the "*Bernoullianum*" at Basle, together with a table showing the state of humidity of each month of the year ending June 30, 1879.

The observatories at Berne and at Basle being private institutions, I experienced some difficulty in obtaining the information I had asked for—the parties in Berne, however, willingly complied with my request, after some time, but the Bernoullianum here have not, up to this moment, made any reply to a second application from this office.

RALPH L. DOERR, *Consul*.

UNITED STATES CONSULATE,  
Basle, December 6, 1879.

[Translation.]

BERNOULLIANUM, Basle, November 20, 1879.

MOST HONORED SIR: The meteorological observances made in our institution are published in form of a summary table that appears in the "*Schweizerische meteorologische*

*Beobachtungen*," edited by Prof. Rud. Wolf, at Zurich, and thereby will be seen also the quantities of precipitate from July 1, 1878, to July 1, 1879.

In case the establishment for which you collect the reports does not receive the above-named "*Schweizerische Beobachtungen*," I am convinced that the "*Schweizerische meteorologische Centralanstalt*," at Zurich (the principal guidance of which is incumbent on Professor Wolf and of which Mr. Robos Billwiller is the chief) will be happy to forward the printed reports to the parties.

If necessary, I hold myself at your disposal for interfering in the matter, for which purpose, however, I ought to know whom I am to send the copies to. If there be wanted but one single communication I could, if you wish for, get the desired pages copied, or send you the respective parts of the prints in order to take copies from them.

With highest consideration,

HAGENBACH-BISCHOFF.

Mr. RALPH L. DOERR,

*Consulate of the United States of North America.*

[Translation.]

TELLURISCHES OBSERVATORIUM, *Berne, November 21, 1879.*

MOST HONORED SIR: Inclosed I beg leave to hand you the summary, in form of a table, of the quantities of precipitate from July 1, 1878, to July 1, 1879, at Berne.

Should it seem desirable to you—which your letter does not mention—to obtain a detailed communication concerning the quantities of precipitate on single hours of rain, I am quite ready to forward them to you.

With highest consideration,

PROF. DR. FÖRSTER.

The Hon. CONSULATE OF THE UNITED STATES OF NORTH AMERICA,

*At Basle.*

*Summary of the precipitate at Berne from July 1, 1878, to July 1, 1879.*

[Amounts of precipitate in millimeters.]

1878.	
July.....	82.60
August.....	131.80
September.....	47.80
October.....	80.30
November.....	60.70
December.....	109.20
	512.60
1879.	
January.....	52.80
February.....	109.20
March.....	20.70
April.....	71.40
May.....	98.70
June.....	70.90
	423.70
Total from July 1, 1878, to July 1, 1879.....	936.30

PROF. DR. FÖRSTER.

## SPAIN.

## BARCELONA.

*Meteorological observations taken at the Observatory at Mont-Zuich, Barcelona, for the year ending September 30, 1879.*

Months.	Thermometer.		Barometer, aneroid.		Hygrometer, Saussure.		Pluviometer, Babinet.
	Reaumur.	Centigrade.					Rain, in millimeters.
	Minimum.	Maximum.	Minimum.	Maximum.	Minimum.	Maximum.	
1878:							
October .....	9.4 to 11.8	23.0 to 29.9	750	767	69	93	43.0
November .....	2.4 to 3.0	15.8 to 19.7	746	769	66	92	20.0
December .....		12.6 to 15.7	744	768	68	92	21.0
1879:							
January .....	4.8 to 6.0	12.5 to 15.6	737	769	71	94	91.0
February .....	—1.2 to 1.5	12.0 to 15.0	740	764	69	90	49.0
March .....	5.0 to 6.2	13.5 to 16.8	744	776	72	89	44.5
April .....	6.0 to 7.5	14.0 to 17.5	741	763	70	89	21.2
May .....	6.5 to 7.3	17.4 to 21.9	752	768	70	89	28.3
June .....	11.0 to 13.8	25.4 to 31.9	755	769	68	93	.....
July .....	15.0 to 18.7	25.4 to 31.9	754	768	70	88	2.0
August .....	16.8 to 21.0	25.5 to 32.0	756	766	68	88	81.0
September ...	8.2 to 10.4	24.5 to 30.6	756	768	67	90	160.0

FRED'K H. SCHEUCH,  
Consul.

UNITED STATES CONSULATE,  
Barcelona, November 20, 1879.

## MALAGA.

## THE CLIMATE OF MALAGA.

The climate of Malaga is the most delightful of all Europe and is peculiarly adapted for invalids suffering from phthisis, bronchitis, and other diseases produced by the cold of the north. The celebrated Dr. Leyden, of Berlin, says that it is the driest and best climate north of Cairo. The mean rainfall during the year is 22.60 inches; the mean temperature is 13.50 R., or 62 Fahr., and the lowest is 12 R. or 60 Fahr.

From meteorological observations taken during the months of September and October of last year it results that in the former month the barometric oscillation was 9.3; and in the latter it was 11.4; in the first-named month the mean temperature was 23.2 R., or 82.6 Fahr., and in the last-named month it was 20.8 R., or 79.24 Fahr. The prevailing wind in September was south; in October it was east southeast. In September there were 16 bright, clear days, 11 misty, and 3 cloudy days. In October there were 9 bright, clear days, 15 misty, and 7 cloudy days. It is proper to remark that the autumn is the time of the greatest rainfall.

From the middle of December until the 1st of March the weather is warm and clear. I have compiled these statements for the benefit of those whose health compels them from time to time to seek more genial

climes, feeling that in so doing I render a real service to many a suffering invalid.

JOHN Q. QUARLES, *Consul.*

UNITED STATES CONSULÁTE,  
Malaga, February 26, 1880.

# ITALY.

## FLORENCE.

*Record of the meteorological observations kept at the Royal Observatory of Florence during the fiscal year ending June 30, 1879.*

Months.	Monthly mean of thermometer. 100°					Monthly mean of barometer.				
	Average.		Maximum.		Minimum.		Average.		Maximum.	
	°	°	Day.	°	Day.	mm.	mm.	Day.	mm.	°
1878.										
July .....	24.8	36.0	23	11.5	5	754.04	760.38	18	746.41	28
August .....	25.0	35.0	16	14.5	1	53.38	57.92	28	46.30	24
September .....	22.3	33.0	8	11.5	23	53.85	59.50	5	41.78	25
October .....	17.1	26.7	3	6.5	31	55.72	63.30	5	48.59	28
November .....	9.4	18.0	27	0.5	10	52.51	62.71	10	38.11	14
December .....	4.8	13.5	30	1.5	23	50.50	66.20	25	37.27	17
1879.										
January .....	6.7	15.0	24	1.5	21	55.51	63.03	13	38.69	9
February .....	9.9	16.0	11	2.3	19	50.83	59.46	9	28.92	25
March .....	10.5	19.0	31	0.3	4	55.59	70.57	8	41.93	24
April .....	12.6	21.0	25	4.8	20	47.92	59.60	1	39.81	12
May .....	15.1	24.3	31	6.0	2	52.99	62.43	30	44.53	10
June .....	22.3	35.7	28	12.0	3	55.86	60.31	27	50.18	17

Months.	Psychrometer.									
	Moisture.					Pressure.				
	Average.	Maximum.		Minimum.		Average.	Maximum.		Minimum.	
	°	°	Day.	°	Day.	°	°	Day.	°	Day.
1879.										
July .....	46.7	81.0	27	10.0	18	11.63	17.63	22	4.95	18
August .....	51.1	87.0	3	18.0	1	12.79	18.72	24	5.37	1
September .....	55.2	92.0	25	25.0	8	11.39	17.12	1	7.68	3
October .....	70.9	97.0	18	29.0	31	10.42	14.37	22	3.07	31
November .....	81.3	97.0	25	34.0	3	7.43	12.56	27	3.02	3
December .....	83.1	99.0	31	40.0	22	5.61	9.62	21	3.15	16
1879.										
January .....	73.2	99.0	3	26.0	5	5.74	9.93	1	2.67	5
February .....	83.3	94.0	3	36.0	19	7.44	10.68	11	3.44	21
March .....	64.9	91.0	2	16.0	14	6.45	10.33	20	1.84	14
April .....	69.3	99.0	4	39.0	25	7.68	10.39	2	4.94	13
May .....	61.6	95.0	17	27.0	13	8.22	14.52	30	3.82	13
June .....	50.4	81.0	1	18.0	28	11.0	14.68	25	6.26	14

*Record of the meteorological observations, &c.—Continued.*

Months.	Prevailing wind.	Pluviomete—rainfall.			Weather.				
		Quantity in mil- limeters.	Days.	Hours.	Serene.	Partly serene.	Changeable.	Partly cloudy.	Cloudy.
1878.									
July .....	O.	21.5	4	3.40	5	9	16	1	.....
August .....	S. O.	23.3	4	4.30	2	5	19	5	.....
September .....	N. E.	80.8	8	22.20	4	4	20	2	.....
October .....	O.	194.2	15	70.50	3	1	12	11	4
November .....	E.	190.1	26	104.45	.....	.....	13	11	6
December .....	E.	139.4	20	60.00	.....	2	8	9	12
1879.									
January .....	N. E.	27.0	12	22.35	2	1	11	5	12
February .....	S. O.	136.2	21	83.30	.....	.....	6	14	8
March .....	O.	62.8	13	27.30	2	5	14	7	3
April .....	O.	202.7	24	87.30	.....	.....	8	16	6
May .....	O.	105.8	17	54.00	.....	1	9	15	6
June .....	O.	6.5	4	3.00	4	11	14	1	.....

UNITED STATES CONSULATE, *Florence, October 31, 1879.*

J. SCHUYLER CROSBY.

**LEGHORN.***Statement showing the humidity of the air at the city of Leghorn, Italy, for the year ending September 30, 1879.*

<b>1878.</b>	
October .....	71.5
November .....	73.8
December .....	79.2
<b>1879.</b>	
January .....	70.0
February .....	75.6
March .....	69.8
April .....	70.7
May .....	68.2
June .....	66.6
July .....	66.7
August .....	66.0
September .....	64.5
Annual average .....	70.3

UNITED STATES CONSULATE,  
*Leghorn, October 17, 1879.*

EMILIO MASI.

**PALERMO.**

The climate of Palermo is healthful, but it lacks that bracing, invigorating element found in the air of Northern Italy and Southern France. The sirocco, a hot wind, traverses the island quite frequently in spring and autumn and very sensibly augments the degree of heat. Its effects are most distressing on some persons, causing great lassitude and *ennui*. The winters are mild and of short duration, and the heat of summer is tempered by a refreshing sea breeze, commencing about 10 o'clock a. m. and continuing till about 4 o'clock p. m. The temperature is so mild that cauliflowers and green pease are in season in February. The rainfall is very unequally distributed over the year. Rain is of rare occurrence in the months of June, July, and August, not exceeding, on an

average, one inch, while the average annual rainfall is about 25 inches. The annual mean temperature is 63° Fahr. The mean of August, the hottest month, is 77°; that of the coldest, February, 53°. Maximum summer heat, 100°. The greatest degree of cold in winter, 31°.

S. P. BAYLY.

UNITED STATES CONSULATE,  
Palermo, January 15, 1880.

*Table, prepared by the director of the Observatory at Palermo, showing the humidity of the atmosphere during each month of 1879.*

	Relative humidity.
January .....	64.5
February .....	61.0
March .....	60.8
April .....	54.9
May .....	59.0
June .....	59.3
July .....	59.3
August .....	66.7
September .....	64.8
October .....	66.4
November .....	58.3
December .....	62.9

## ROME.

By a report made to me by the Observatory of the Collegio Romano, the relative of humidity in centessimi of saturation, from July 1, 1878, to December 31, 1879, by months, is as follows:

*Relative humidity of Rome in centessimi of saturation.*

Months.	Maximum.	Minimum.	Average.
1878.			
July .....	96	23	58.1
August .....	93	25	56.3
September .....	94	28	61.7
October .....	97	26	72.2
November .....	100	26	75.8
December .....	100	41	77.9
1879.			
January .....	100	40	75.7
February .....	100	40	76.8
March .....	100	15	65.8
April .....	96	36	68.5
May .....	97	30	69.2
June .....	90	24	57.7
July .....	82	26	55.9
August .....	89	28	59.3
September .....	100	27	65.1
October .....	92	36	68.2
November .....	100	24	70.0
December .....	94	11	60.7

EUGENE SCHUYLER,  
Consul-General

UNITED STATES CONSULATE GENERAL,  
Rome, February 29, 1880.



## AUSTRIA.

## VIENNA, ISCHL, AND GRATZ.

*Statement showing the average humidity of each month of the year 1879, as recorded at the Meteorological Observatories of Vienna, Ischl, and Gratz, in Austria.*

[The figures indicate the percentage of a maximum humidity reckoned at 100.]

Months.	Vienna.	Ischl.	Gratz.
1879.			
January .....	87	89	79
February .....	83	84	79
March .....	74	82	65
April .....	72	73	67
May .....	72	74	72
June .....	72	76	77
July .....	73	81	81
August .....	70	79	80
September .....	74	85	80
October .....	81	88	86
November .....	84	85	88
December .....	88	85	89
Average for the year .....	77	82	79

For the above data I am indebted to the vice-director of the Imperial Royal Meteorological Observatory at Vienna.

JAMES RILEY WEAVER,  
*Consul-General.*

UNITED STATES CONSULATE GENERAL,  
Vienna, January 29, 1880.

## WARSAW.

In accordance with the circular of the Department of State, dated April 3, 1879, I give herewith a table showing the average humidity of each month for the year 1877, according to the meteorological observations taken in the Warsaw Astronomical Observatory:

## Absolute humidity.

Millimeters.	Millimeters.
January .....	3.75
February .....	3.82
March .....	3.89
April .....	5.16
May .....	7.28
June .....	10.19
July .....	11.71
August .....	11.59
September .....	7.51
October .....	5.91
November .....	5.38
December .....	3.68

## Relative humidity.

Per cent.	Per cent.
January .....	87.1
February .....	87.9
March .....	79.4
April .....	77.8
May .....	70.0
June .....	64.0
July .....	72.5
August .....	74.8
September .....	80.7
October .....	81.7
November .....	87.1
December .....	89.3

JOSEPH RAWICZ.

UNITED STATES CONSULATE,  
Warsaw, September 30, 1879.

# MISCELLANEOUS REPORTS.

## AUSTRIA.

### PRODUCTIVE VALUE OF LAND IN AUSTRIA.

*Report, by Mr. Kasson, American minister at Vienna.*

Some interesting statistics relating to land and its net productive value in Austria have recently fallen under my observation. For the department of comparative statistics in the Census Bureau, or in our Agricultural Department, they should have a special interest. I transmit them for such use as may seem to you proper.

A central commission is here organized for the regulation of the land tax in this empire. At the meeting of this commission three days ago the government laid before it the official valuation of the net yield of the taxable lands in Austria, arranged by provinces and groups of provinces, as shown in the accompanying table. It is proposed to adjust the tax according to the productive value of the real estate as shown by the amount of the profits derived from the land after paying expenses of cultivation. This valuation of the net yield for each province, and per *joch*,\* is shown in the exhibit attached hereto.

JOHN A. KASSON.

*Statement showing the quantities and net yield of the taxable lands in Austria.*

Provinces.	Quantity of land.	Annual net yield.	
		Total.	Total per joch.
	<i>Jochs.</i>	<i>Florins.</i>	<i>Fl. Kr.</i>
Lower Austria .....	3,328,026	21,848,136	6 56
Upper Austria .....	1,939,144	11,558,229	5 98
Salzburg .....	1,065,072	1,776,720	1 67
Innsbruck .....	2,868,844	2,783,789	97
Trient .....	974,728	2,138,735	2 20
Vorarlberg .....	399,095	735,223	1 84
Total for Tyrol and Vorarlberg .....	4,242,667	5,657,747	1 33
Styria .....	3,676,640	13,003,296	3 54
Carinthia .....	1,644,895	3,450,808	2 10
Carniola .....	1,655,915	3,060,845	1 65
Triest .....	15,135	97,227	6 42
Istria .....	832,453	2,239,637	2 69
Goritz-Gradiaca .....	451,012	1,916,335	4 25
Total for coast lands .....	1,298,600	4,253,199	3 28
Dalmatia .....	2,181,622	1,001,211	69

\* 1 acre = 0.404671 hectare; 1 joch = 0.5754642 hectare; 1 hectare = 2.47 acres = 1.73 joch.

Statement showing the quantities and net yield of the taxable lands in Austria—Continued.

Provinces.	Quantity of land.	Annual net yield.	
		Total.	Total per joch.
	<i>Jochs.</i>	<i>Florins.</i>	<i>Fl. Kr.</i>
Prague .....	2, 798, 962	18, 964, 495	6 77
Leitmeritz .....	1, 134, 523	7, 725, 992	6 81
Eger .....	1, 253, 624	8, 046, 361	6 42
Chrudim .....	1, 847, 167	11, 328, 538	6 12
Budweis .....	1, 703, 130	6, 516, 782	3 82
Total for Bohemia .....	8, 737, 406	52, 582, 168	6 02
Moravia .....	3, 745, 940	27, 424, 227	7 32
Silesia .....	868, 945	4, 022, 735	4 63
Lemberg .....	5, 276, 787	9, 772, 217	1 85
Tarnopol .....	4, 214, 054	12, 070, 062	2 87
Cracow .....	3, 701, 947	8, 133, 576	2 20
Total for Galicia .....	13, 192, 788	29, 975, 855	2 26
Bukovina .....	1, 760, 387	3, 183, 404	1 81
Grand total .....	49, 338, 047	183, 298, 580	3 72

## CHINA.

### CULTIVATION OF SUGAR-CANE IN CHINA.

*Report, by Consul Lincoln, of Canton, on the cultivation of the sugar-cane—sorghum—and the manufacture of rock candy, in China.*

I am enabled, by personal investigation and a report from our consular agent at Swatow, to give the following information relative to the culture of Chinese sugar-cane, or sorghum, and the manufacture of crystallized sugar and "rock candy."

From the sources mentioned I learn—

1st. That the Chinese never allow their sugar-cane to produce seed; therefore it is impossible to obtain any here.

2d. The sugar-cane is grown from cuttings, in the following manner:

When the cane is cut down the tops are cut off and bound in bundles; the leaves of these top-cuttings are taken off. The cuttings, which usually have four or five joints, are placed in a pond of fresh water, where they remain in soak for some twenty days, at which time the joints mentioned will have thrown out sprouts or buds.

These will be some 4 or 5 inches in length; the cuttings are then planted in rows about 2 feet apart and on an angle of about 60°. The cuttings, when planted, are slightly manured with bean-cake, which is the compressed pulp of the yellow China bean, which grows abundantly in the northern portion of the empire. It requires ten months from time of planting before the crop is matured and ready for harvesting.

From the roots of this crop, they being well fertilized with the bean-cake in a semi-liquid form, a second crop is produced. A third yield is sometimes secured in this manner, but only where the soil is exceptionally rich. If the soil is not sufficiently fertile for a third crop, the roots are removed, the land cultivated and manured as for the first crop, and cuttings are planted every two years, as above described.

3d. The cane when cut is collected into bundles and conveyed by men or boats, according to locality, to the mill or crusher.

This consists of two granite cylinders about 3 feet in length by 18 inches in diameter, placed perpendicularly, the lower ends revolving in a stone socket, the upper in a frame of wood set into granite uprights; attached to or let into the upper end of these cylinders are wooden cogs, and to the end of one of these cylinders is attached a strong wooden shaft or spindle, to the upper end of which is fixed a strong cross beam or lever, to the outer end of which is attached the propelling power, which usually consists of five or six small oxen. These are driven around at a rapid walk, the cane passed between the cylinders, the juice running down into a small trench leading to a cavity of 20 or 30 gallons capacity, formed in the ground; both trench and cavity are rendered secure from leakage by being chunamed. The juice is then conveyed in buckets to the boiling-pans near at hand. I am told that though the cane is passed between the cylinders several times, a very small part of the juice is extracted, when compared with what is done with the improved foreign crusher.

The cane after being crushed is frequently used as fodder, and sometimes is dried in the sun and used for fuel for boiling the sugar.

4th. The boiling-pans are of cast-iron, the greater portion of those used in this part of the country being made at Fat Shan, some 15 miles in the interior from Canton. They are some 18 inches deep by about 4 feet in diameter; are placed in brick-work side by side, usually four in number, with arches for fuel underneath, all covered with a mat or thatched shed. In some of the larger districts, owned by wealthy Chinamen, several sets of these pans may be found under one roof.

I visited a large rock-candy manufactory at Fat Shan, a few days since, and learned that the best quality of this article is made from white, and a poorer article from brown, sugar, in the following manner:

The sugar is placed with a sufficient quantity of water in a large boiling-pan, similar to the ones described, and boiled down to the proper consistency, which is ascertained by putting a small quantity into cold water. If it hardens at once it is then time to run it off into earthen jars. These jars hold about 50 pounds each. They are always broken in three or four parts, and these parts are then bound together with a small quantity of lime cement and a few bamboo or rattan hoops. The hot liquid is then put into these broken jars and a network of basket splints is placed over each jar, the ends of the splints extending in different directions through the liquid to the bottom of the jar. If the temperature is cold it will crystallize in about fifteen days; if warm, it requires from twenty-five to thirty days. As it crystallizes it adheres to the splints; the portion not crystallizing settles to the bottom. The jars are then placed with bottom part turned partly up over empty ones to allow the molasses to run out. When sufficiently drained the jars are removed, the hoops taken off, and with a small hatchet the parts pried asunder; the candy is then broken from the splints and spread out in the sun for a short time to purify or bleach, then assorted and packed into wooden tubs holding from 40 to 50 pounds, and sent to market.

Two qualities are always found in the jars, that at the bottom being darker, and of course of less market value.

The drainings from these jars are reboiled and a poorer quality of brown sugar produced; from the refuse remaining after this last process a cement is made by mixing with lime.

Consular Agent Williams gives the following detailed statement of the process pursued in the manufacture of what is known as "green sugar."

December is the month when they begin to boil the juice; as it is taken from the crushers in buckets it is poured into one of the four iron boiling-pans; a man is in attendance who bails the juice from one pan to the other. As soon as the liquid is brought to a boil a small portion of lime is put in, and the white of one or two eggs is put in each pan. After a short time the dirt and refuse come on the surface, which is all skimmed off from time to time while the sugar is boiling. When sufficiently boiled it is run off into a wooden cooler about 7 feet long, 4 feet wide, and 1 foot deep; and while in the hot liquid state a man begins to stir it back and forth with a piece of wood 1 foot long, 6 inches broad, by 1 inch thick, attached in the center to a handle 4 feet long. With this wooden hoe he keeps the liquid in constant motion until it begins to granulate and cool, and when cool enough several men mix and rub it with their hands until all the lumps are bruised and the sugar becomes all of one color, which is a dark yellow; it is then put in baskets and sold to sugar-dealers, who put it up in mat bags, and then brought to market for sale to merchants for shipment.

The sugar principally exported to foreign countries is what is known as "clayed sugar," and is made as follows:

When the juice is boiled to a proper consistency, the whites of two eggs are put into each pan, which serves as a clarifier; when sufficiently boiled it is run off into conical-shaped earthenware jars; these are placed in rows, either over a chunamed trench leading to a larger receptacle or over empty jars. In the bottom of each jar containing the sugar is a small aperture in which is placed a wisp or bung of straw; when the sugar has become sufficiently granulated by cooling and an occasional stirring, the straw bung is slightly loosened, the portion not becoming sugar escapes into the trench or empty jars. When sufficiently drained a thin layer of straw is placed over the sugar, and over this a thick layer of clay. The jars are then packed away in a dry place, where they remain from thirty to forty days, according to the state of temperature. If cold, forty; if warm, thirty days. The coverings and straw bungs are then removed, and each jar will be found to contain three qualities or grades of sugar, the upper part being white, the next light brown, and the bottom a dark brown.

The drainings are sometimes used for distilling purposes, and also in making cement, as above stated.

It seems there are two kinds of cane grown here; one, and the better for sugar, is of a dark purple color, and much harder than the other, which is green and quite tender. The latter is principally sold, in pieces about 8 to 10 inches in length, to the natives, who eat it in its raw state.

C. P. LINCOLN.

UNITED STATES CONSULATE,  
Canton, March 10, 1879.

## THE MANUFACTURE OF MATTING IN CHINA.

*Report, by Consul Lincoln, of Canton, on the manufacture of matting in China, from the planting of the grass until the same is woven.*

The manufacture of matting is confined almost exclusively to Southern China, and is one of the very important industries of this section. This article of trade is not alone confined to floor-matting, so much of

which is used in the United States, but enormous quantities are used as sails on all native sailing craft, being much cheaper, and in this climate equally if not more durable than the ordinary canvas or sail-cloth.

Large quantities are also used as covering for boxes and packages in which tea, sugar, cassia, &c., are exported, also in making money-bags, it being a very convenient mode of handling dollars, especially when broken up into small pieces by the constant stamping or "chopping" of the dollars, as is the custom in this portion of China.

The plant, used in making mats, sails, &c., so extensively used in China, is known as "aquatic grass," also as "rush." It is cultivated extensively in the Shuihing department, on the West River, some seventy-five miles in the interior from Canton. I have visited this place twice, where I saw large quantities being grown, in fields flooded with water, as is done in rice cultivation.

It requires very little if any care in its cultivation, as it propagates itself by shoots from the root, and attains a height of from six to eight feet. It is brought to market in bundles of about twelve inches in diameter, and if of proper length and good quality sells at from 18 to 24 cents per bundle, each being sufficient to make four bed-mats, or six such as are used in making sails.

The district of Tung Kuan produces large quantities of this grass, but of a species used almost entirely in the manufacture of floor-matting. It is grown in fields similar to the other, but where it is overflowed and left dry by the flooding and ebbing of the tide.

It is said to grow better in the vicinity of salt water, where the water flooding it is somewhat brackish. It is planted usually in the month of June, from slips. These are allowed to grow for about two months, when they are replanted in rows. The soil should be fertile, and is usually made so by manuring with bean cake. It requires nearly one year to mature, when it is cut; the shoots or straws are split in two with a knife, and, when partially dried in the sun, packed in bundles as described, and either manufactured into matting at the city of Tung Kuan or brought to Canton, where there are several extensive manufactories.

The planting of slips is only required once in four or five years, as they send up fresh shoots similar to the sugar-cane described in a former dispatch. If not replanted every four or five years they become coarse and unfit for use.

I recently visited one of the largest manufactories here, owned by a Chinese firm, Choey Sun, whose brands are well known to dealers in the United States, and as the *modus operandi* of drying, weaving, &c., observed by me there may be of interest, I will say: The grass when brought to the manufactory is carefully sorted, the perfect being used in manufacturing the finest and the other, poorer quality.

After being thus sorted it is made into bundles of two or three inches diameter and placed in large earthenware jars holding some ten gallons of water; several hundred of these were standing in an open yard. It is allowed to remain thus in soak for three days, when it is taken out and dried in the sun for one day. If to be dyed the ordinary red color, which has been for years much in vogue, it is then placed in other similar jars containing a liquid dye, made by soaking red sapan wood chips in water. (Boiling extracts the coloring matter more rapidly.) It remains in these jars for five days, then dried one day, then immersed in the dye again for three days, when it is usually ready for use; but if the color is not sufficiently deep it is again placed in the dye for two or three days.

It is only within the past two or three years that other colors, such as green, yellow, and blue, have been used to any extent, the impetus having been given by the introduction of chemical dyes, the usefulness of which the matting-makers seem to fully appreciate.

The solution for coloring yellow is produced from the seeds and flowers of a plant common to China, "hui fä." A yellow coloring matter is also made by boiling for several hours twenty-five pounds of *Sophora japonica* in one hundred gallons of water and adding, when cooled, one pound of alum to each ten gallons of the solution.

Green and blue are produced from the twigs and leaves of the "lam-yip" or blue plant, which grows in abundance near Canton. To the solution thus produced a small quantity of chemical dye is now usually added. In dyeing these colors the straw is soaked in water for seven days, and then immersed in the coloring matter for a few hours only, the solution being hot. When the vegetable dye alone is used, a longer process, similar to that for dyeing red, is necessary.

Fifty looms were being worked at this manufactory, eight of which were large and forty-two small. The large ones are exactly the same as the ordinary silk loom, and are used in making the very wide and also the damask or carpet patterns. Three men are required to work each of the large looms, their wages being from thirty to forty cents each per day. Eight yards of matting from each loom is considered an average result of a day's work. The small looms are certainly rude and simple, each being worked by two small boys, who are paid from fifteen to twenty cents per day each, and who daily weave five yards of most perfect matting of the more ordinary patterns.

The loom is composed of two uprights, driven into the ground about five feet apart, and about four feet in height; two cross-bars fit into sockets in the uprights, one at the top, the other about eight inches from the ground. The warps, which are strings of Chinese hemp (2½ yards in length), are then passed over the upper and round beneath the lower cross-bar, through the holes in the weaving-bar, and being drawn taut, are fastened by both ends to a long, thin piece of bamboo placed parallel with and just below the lower cross-bar.

The weaving-bar and most important part of the loom consists of a piece of wood varying in length according to the width of the matting required and about two inches square; through this small holes are pierced at different intervals, into which the warps are passed as stated; the bar can thus be worked up and down in the warps by means of handles near the extremities. These holes vary in distance from each other, according to pattern desired. Alternately on top and bottom the holes are enlarged or formed into slots converging at the center of the stick. When the warps have thus been arranged and bundles of different colored straw, sufficiently dampened, deposited near the loom, one of the boys raises the weaving-bar to the top of the warps, tipping it forward, the slots in the bar allowing the alternate warps to remain perpendicular, the holes carrying the others forward, thus separating them sufficiently to admit of a single straw being passed between them. This is done by means of a long, flat piece of bamboo, a notch being cut near the end, into which one end of the straw is placed and then used as a shuttle. When the bamboo is withdrawn the weaving-bar descends, carrying the straw to the bottom; the bar is then raised again and tipped down, thus carrying the warps backward which had just before been passed forward, the work of the shuttle being repeated. As the weaving-bar presses the straw down, the weaver gives the ends of the straw a half turn round the outside warps, the operation as described

being repeated until the warps are full, the edges are trimmed, the warps untied, the matting (now two yards in length) removed, and a new set of warps put on.

The matting thus woven is then dried in the sun and over a slow fire.

The shrinkage consequent on this drying is nearly four yards in forty. When dried it is stretched on a frame and worked down tight by hand, then sent to the packing house, where numerous men are engaged in fastening the two-yard lengths together, it requiring twenty lengths to make the ordinary roll. The fastening together is done by taking the projecting ends of the warps of one piece, and, by means of a large bamboo needle, passing them back and forth through the reeds of another piece, in fact sewing them together. Each roll of forty yards is then nicely covered with a coarse, plain, straw mat, marked and numbered ready for shipment.

## DENMARK.

### BUTTER-MAKING IN DENMARK.

*Report of a lecture on ice-houses and temperature variations in butter, delivered by Professor Fjord at the Royal Danish Agricultural Society of Copenhagen.*

[Translated by Consul Ryder.]

I have the honor to transmit, herewith subjoined, a report of a lecture delivered at the Royal Danish Agricultural Society of this city by Docent Fjord, which no doubt will prove of interest to those of our citizens engaged in the dairy business. The report, which gives an account of some experiments on the laws of dwindling loss in ice-houses, and temperature variations in butter when in a state of repose, or during its transport in common butter-casks, has been taken down by me in shorthand, with the help of inclosed tables, and is as follows.

The lecturer stated that the first experiments had been carried out partly with the aid of the funds which in the latter years have been granted by the treasury, and partly through the support of individuals, who have so arranged their ice-houses that the water from the melted ice could be measured daily. For this purpose the ice-box must have a wooden floor, which is either made tight by caulking, as in a ship's deck, or else is covered over with a zinc or copper covering. Of such ice-houses, 8 altogether have been built, in which the loss has been daily measured.

The measuring of the loss was extended over four years, and the lecturer was enabled to show such a regularity in the loss that fixed rules could be laid down how the loss could be reckoned beforehand. The experiments had plainly shown that the loss in these ice-houses of such various sizes, mainly, from 200 to 27,000 cubic feet, took place after the same physical law as that by which heat is carried through conductors; and equally as the amount of heat which is let through different matters is dependent upon the conducting power of the medium, so is the loss of the ice-houses dependent upon a "loss tabular," which is the same for ice-houses of every size, where the construction and situation with regard to shade are similar, and the houses either are not in use, they are then called experimental ice-houses, or they are in use in like manner either as household or dairy use.



Although the loss can be measured in the same way as the conducting of heat, still this warmth is not to be looked on as the only cause of the loss, because warm air can at the same time penetrate into the house, especially when in use, and the air-streams on the outside of the ice-box will in a measure take effect on the isolating substances. The further-on mentioned tabular loss during the given trials must mainly be considered such as would hold good where a house adjoining to others had a like amount of shade and shelter. It is also taken for granted that it has an exterior wall, with a layer of straw of 2 feet between the wall and the ice-box. The ground loss must be brought down to about twelve inches for the year, but this can be arrived at without the use of a wooden flooring.

It has been proved that the loss in one and the same ice-house, from month to month, from year to year, and in the small ice-houses of the Agricultural High School even from day to day, rises and falls with the mean temperature of the year, month, and day. For example, when a mean temperature of  $16^{\circ}$  gives a daily loss of 80 pounds, so will a mean temperature of  $12^{\circ}$  give 60 pounds, of  $8^{\circ}$  40 pounds, and so forth. Thus, 5 pounds for  $1^{\circ}$  of mean temperature. The loss per degree of heat was as near as possible the same during the whole of the summer and autumn, at least until the house was half emptied, and likewise it had no influence when the house, by a more or less careful filling, happened to contain more or less ice—that is to say, 35 or 45 pounds per cubic foot; but naturally there remained a larger quantity of serviceable ice where a larger quantity had been laid in. In the spring, on the other hand, there was no regular conformity of loss before the ice mass was thawed through, and this only occurred in the large ice-houses where the ice had been collected during hard frost, about the beginning of June. The difference in the greater or lesser loss during spring, according to the ice having been collected during frost or thaw, could, however, not be calculated at more than 5 per cent. In ice-houses of different sizes it had been proved that it is not the room space of the ice-house, but rather the surface of the ice-box, namely, the area of walls, floor, and ceiling, which regulate the extent of the loss, and in such way that the loss increases in proportion to the area. The same amount of loss will therefore take place, for example, on 100 square feet of area, whether the ice-box has an area of 216 square feet, as in the smallest of the ice-houses, or of 600, as in the medium ones, or of 600 to 700, as in the largest. The daily loss for 100 square feet of surface, and with one degree of mean temperature, the lecturer defined as being the amount of loss; and by an autographed table, over the loss during twenty-one months' observations in three experimental ice-houses of 216, 381, and 8,192 cubic feet, it was shown that the loss was not dependent upon the size of the house nor the degree of heat. In 1876-'79 the amounts of loss were given in order after the size of the houses, for August, with 1.31, 1.35, 1.34, 1.38, 1.37. The lecturer placed the loss for the experimental ice-houses at 1.4.

The household ice-houses—two at Vallo and one at the Coast Hospital (1,000 to 1,400 cubic feet)—which are provided with outer and inner tight-closing but not isolated wooden doors, had had in the same time, when they had been in use, an equal amount of loss, namely, about 1.7 to 2.5 per cent. higher than the experimental ice-houses, and the same amount of loss was found in the large dairy ice-houses. The increase proceeds partly from the incomplete protection which the wooden doors afford, even when they are tight-closing, partly

because the doors at times are left open during use, and probably also from the doors not being quite tight. The warm air which is introduced in the house whilst the doors are opened and shut has but a trifling influence, as 100 cubic feet of summer warmth can only melt one pound of ice; but if one carelessly allows the doors to remain open or ajar, or if they are insufficiently tight, then can several hundred cubic feet of air be introduced, and thus the loss will be considerably increased and at the same time irregular.

When 100 square feet of surface, with  $1^{\circ}$  of mean temperature, give a daily loss of 1.7 pounds of ice, so can the loss in ice-houses of any size be easily ascertained for each month in the year or for the whole year, of normal temperature, and for a normal ice-saving year when part of the ice can be reckoned as having been housed during frost and during thaw. The amount of loss being known, the remaining ice—serviceable ice—will be the difference between the housed mass and the loss, and the reverse when it is known how large a quantity of ice is required for household purposes or for the dairy. So can the size of the ice house be calculated,

*Calculation of the loss during the year and the remaining ice (serviceable ice), with a loss of 1.7 pounds, and when the housing has been made at different intervals.*

Ice-houses.		Loss in the year, with housing at various intervals.				Serviceable ice.	
Capacity of room.	Area of ice-box.	35 pounds per cubic foot.	45 pounds per cubic foot.	35 pounds per cubic foot.	45 pounds per cubic foot.	35 pounds per cubic foot.	45 pounds per cubic foot.
Cubic feet.	Square feet.	Pounds.	Pounds.	Per cent.	Per cent.		
512	384	500	389	97.6	75.9	12	123
1,000	600	781	607	78.1	60.7	219	393
2,000	906	1,256	977	62.8	48.9	744	1,028
5,000	1,813	2,359	1,835	47.2	36.7	2,041	3,165
10,000	3,076	4,002	3,113	40.0	31.1	5,998	6,887
20,000	5,576	7,255	5,643	36.3	28.2	12,745	14,357

From the foregoing table it will be observed that with careful filling (45 pounds) the loss in cubic feet will approach very nearly with the area of the ice-box in square feet, and there, therefore, melts in a year an ice mass which has that area of ground surface and is 12 inches in thickness; but where there are only 35 pounds per cubic foot in the filling there will be the thickness of the melted layer increased to  $12 \times \frac{45}{35} = 15\frac{1}{2}$  inches. From the greatness of the numbers in the ——— for serviceable, the great importance is further made manifest in a careful filling of the small ice-houses. As a general rule for all ice-housing, it is shown that the smaller the surface can be made in proportion to the amount of ice, so much less will the loss be, and it is therefore absolutely to be avoided, when the ice is preserved in "batteries" in turf ground, to collect it in two or three small batteries instead of one large one, and likewise to lay out a small long one rather than one of equal breadth and length.

The lecturer next dwelt upon different experiments, showing that the dwindling loss took place under the same diminishing laws in houses that had not a tight wooden flooring, but were of turf-ground, sawdust, heath, leaf-wood, under the ice. In four houses at the agricultural high school, two with and two without shade, trials had been made, as

also in the experimental ice-house of the agricultural society in Svendborg in 1878. As the ice in these houses was left solely in the way of experiment, and none of it taken for use, the loss at the close of the trial on the 3d November of last year could thereby be determined, the ice being leveled, the side loss filled up, and the distance from the ceiling to the ice measured. The loss for the two experimental houses which stood in the shade was 1.4; for the two without shade, 1.5. Both had exterior walls and one ell of straw, but in the one of them the ice-box is a walled box, the other a wooden box. Both had a flooring of three-fourths ell of turf-ground. The loss was equal. In the Svendborg house, which is divided into eight compartments, four toward the east and four toward the west, the extraordinary difference was shown that in the easterly half of the house the loss was 1.5, while in the westerly half it was 2, which would evidence that the westerly sun was the most dangerous to ice. At the same time, there is some shade with the morning sun, while there is none later in the day. The west side lies entirely free. The house has wooden partitions. This year the experiment is being renewed with bricked outer walls. In the same ice-houses trials were made over the ground loss with different thicknesses of underlayers, and with the following results:

	Inches.
Two compartments, with 11½ inches of leaf-wood under the ice.....	14.3
Two compartments, with 18½ inches of leaf-wood under the ice.....	15.3
Two compartments, with 13 inches of turf-ground under the ice.....	15.8
Two compartments, with 23 inches of turf-ground under the ice.....	8.0

From this result it would appear that 12 inches of leaf-wood give a somewhat better security than 12 inches of turf-ground, while at the same time the rather surprising disproportion that an increase of thickness of the layer of leaf-wood is more of a disadvantage than a benefit, while on the other hand the ground loss is diminished in proportion to the increase in the thickness of the turf-ground layer. These trials are also being renewed. The ground loss in the house at the agricultural high school, with 18 inches thickness of heath as layer, was, during the same period, 13.2 inches.

Of the influence which the thickness of the isolating layers on the sides exercises on the dwindling loss no trials have yet been made, neither as regards the difference afforded by an outer wall of masonry as compared with one of wood, but it can scarcely be doubtful but that the foregoing mode of calculation may be used in all cases when only the loss is fixed for the different methods of preservation.

Finally, experiments have this year been made on a larger scale with salt-water ice collected during frost about one-half mile north of Copenhagen. This ice has been preserved equally as well as fresh-water ice; but it was somewhat porous, so that 2 to 3 pounds less per cubic foot was contained in it.

The lecturer next proceeded to dilate over another series of experiments—the temperature variations in butter when in a state of repose, as during transport by rail and steamer.

These experiments were made in consequence of an application made to him by Professor Segdse for advice how to prevent the butter intended for the London Exhibition from being injured by an eventual high rate of summer heat, namely, like that which had been so injurious during the Exhibition at Svendborg in 1878. The object in view should be the obtaining such an artificial cooling that it did not at the same

time cause any deteriorating effects to the state in which the butter should be exhibited. The lecturer, to be enabled to give such advice, should ascertain first at what rate the variation of temperature in butter took place, and next at what temperature the latter might probably be exposed to, not only at the exhibition, but also during the transport by rail and steamer.

As it was so unusually cold for some days before as well as during the Exhibition in London, the prepared cooling apparatus was not brought into use; but as the experiments are the same as would have been made, the lecturer, when he in general should give advice with regard to the transport of butter, considered that the work done had an existing value. After several trials, there were constructed for use at the London Exhibition, 30 inches long, oval, "6 by 10," closed iron-tinned ice-preservers. These should, immediately after arranging the butter at and during the exhibitions, be placed every evening over the butter-casks; they would thus stand in a cold place, and, judging by the below-given experiments, would, with such cooling at night, even with a somewhat high day heat, counteract the heating anew during the day to that degree that the butter's temperature on the first and last days of exhibition will be pretty nearly alike, and equal to what the butter had been when it was sent from Denmark.

*Cold compartment for butter at exhibition during the summer.*

Covers for ice-box and butter-casks.	Average of warmth.		
	The room.	The cold compartment.	Difference.
a. Two layers of old woolen horse cloths .....	19.0	11.0	8.0
b. A layer of new woolen horse cloth .....	19.3	10.1	9.2
c. A layer of thick sheep's-wool carpeting .....	19.1	9.7	9.4
d. Two layers, b and c .....	19.1	8.3	10.8

With measuring of the thermometer taken at different places on the butter, partly near the wood, partly farther down, and partly in the middle, the lecturer had examined how rapidly the butter was heated, and, from several trials, calculated the increasing rate of heat, partly for each separate trial, partly as the mean figures of the trials over the increasing rates, of which there were autographed tables such as are herewith transmitted. There were also obtained the increasing rates for the cases where the butter-casks were covered over, as when sent over to the London Exhibition, with a layer of two inches of rice-shells, or with a lined bag.

The table below gives an average of these increasing rates :

*Increasing numbers for 1° difference of temperature of atmosphere, ÷ being the original warmth of the butter.*

Length of time.	One-third cask.				One-eighth cask.			
	Mean warmth of butter.		Temperature near the wood.		Mean temperature of butter.		Temperature near the wood.	
	Uncovered.	Covered.	Uncovered.	Covered.	Uncovered.	Covered.	Uncovered.	Covered.
Four hours .....	0.16	0.07	0.44	0.21	0.26	0.10	0.53	0.26
Eight hours .....	0.26	0.12	0.57	0.31	0.37	0.17	0.65	0.36
Twelve hours .....	0.33	0.17	0.64	0.37	0.47	0.23	0.75	0.37
One day .....	0.50	0.29	0.77	0.49	0.71	0.39	0.88	0.52
One and a half days .....	0.62	0.40	.....	0.58	0.83	0.52	.....	0.62
Two days .....	0.70	0.50	.....	0.64	.....	0.60	.....	0.66
Three, four, and five days .....	0.83	$\left\{ \begin{array}{l} 0.64 \\ 0.73 \\ 0.78 \end{array} \right.$	.....	$\left\{ \begin{array}{l} 0.74 \\ 0.81 \end{array} \right.$	.....	$\left\{ \begin{array}{l} 0.73 \\ 0.78 \end{array} \right.$	.....	0.86

*The temperature of the oil and the mean temperature which the oil has round the butter casks during transport or in repose.*

The heat of the butter originally is the temperature it has at the commencement, namely, at the place of production in the butter-room; and as the increasing rate had shown itself plainly with the difference between the temperature of the air and the latter's first heat, the actual increase can be easily calculated from these increasing numbers: namely, the increasing rates for the butter's average temperature in an uncovered one-third cask will be for each day  $0^{\circ}.50$ ; if the butter is  $12^{\circ}$  and is exposed for one day to  $22^{\circ}$  temperature of heat, the difference will be  $10^{\circ}$  and the butter's temperature will be  $12^{\circ} + 0.5 \times 10 = 17^{\circ}$ ; after two days it will be  $19^{\circ}$ , and so on. If the air, on the other hand, had been  $32^{\circ}$ , then the butter would already after eight hours have been  $12^{\circ} + 0.26 \times 20 = 17.2^{\circ}$ .

In the experiments which the lecturer had made in regard to the relative proportions in the railway-cars, which had so been placed at his disposal by the Zealand Railway Company that they were either left at the railway station or could be run between Copenhagen and Masnesund, a distance of 65 English miles, owing to the cold and absence of sun during the summer some hinderances had been thrown in the way of these observations, and they were, therefore, incomplete. The wagons which had been used were common closed baggage-cars, and the measuring of the temperature had shown, as might be expected, that the heat was greatest at the top of the car, lowest on the floor; also that the difference in the temperature of the air and in the temperature inside of the car was very considerable. One afternoon at four o'clock was it thus in the latter  $15^{\circ}.5$  C. higher than that of the air, which was  $21^{\circ}.6$  C., and the temperature was thus over the melting point for butter. When the baggage-wagons employed had a white, dry covering, the relative proportions were much more favorable, and they were not much more favorable when the white covering was watered; but the most favorable results, when the temperature of the car was really equal with that of the air, were obtained in using a closed horse-car, with vent-holes in the upper sides.

Experiments made in measuring the temperature on board steamers took place during the voyages between Copenhagen and Thisted and on the return; between Copenhagen, Svendborg, and Kolding; also partly between Esbjerg and the Thames. These trials, which, like the former, are illustrated by the herewith-inclosed tables, were only of partial nature. The ocean here exercised the greatest influence, and the ship's hold maintained a somewhat higher temperature than this, under the influences of several factors, such, namely, as the sun upon the ship's deck and sides, the contiguity of the cargo to the engine-room, also if the ship was built of iron or wood, and so on. On board the steamer Fylla the butter-room was in the upper hold, where the sunbeams fell perpendicularly on the sides,  $6^{\circ}.3$  C. warmer than the water, while the variation in the temperature of the butter-compartment and the water on an average during the whole voyage and the entire butter-compartment was  $2^{\circ}.6$ . When the temperature of the water, therefore, is obtained, one will, in a measure, be enabled to arrive at that of the ship, and by the tables of the increase of temperature in the butter can also be calculated how largely the butter is heated during the voyage, namely, from Copenhagen to England, &c. One also comes to learn at the same time what enemy has to be opposed when any artificial cooling has to be resorted to. In conformity with the observations of the Meteorological Institute over the temperature of the ocean, taken from the light-ships, the highest temperature of the Cattegat is given at  $18^{\circ}$  to  $20^{\circ}$  C., and the Western Ocean a somewhat lower temperature.

In the discussion which ensued Professor Selecke tendered his thanks to Docent Fjord for the trials he had undertaken. Even if one ascertained that the simplest contrivance—a horse-car, provided with ventilators—was the best adapted to butter, one could not remain stationary with this, because in cases of transport of longer duration the results would nevertheless be very unfavorable for butter in such cars. He would invite Mr. Fjord to continue his experiments, in order that one might ascertain how one could obtain, with the use of ice, the most favorable results for butter during its transport by land carriage or by water. Mr. Fjord made mention of the mode in which Mr. Haveman, of Rudkiöbing, sent his butter, inasmuch as the lecturer had recommended him to use ice-boxes of the same construction as those used for the London, Exhibition, and placed them over the butter casks. He had given an account of two voyages where the butter had a temperature of below  $12^{\circ}$  R., while the ships and railway compartments were about  $10^{\circ}$  warmer. Furthermore, the trials made by the lecturer had only been for the purpose of examining those questions which were alluded to in his lecture, to examine their different relations, and what could be done without artificial cooling. The continuation of the experiments, among other things, was a question of money, and they were by no means cheap experiments if an artificial cooling has to be brought about, especially if ice has to be used sparingly.

Councilor Tesdorff brought to notice the great advantages derived by the Danish dairy thrift through the experiments made by Mr. Fjord. With the use of ice and snow one had now become—differently to what was hitherto the case—master over the butter. One had avoided the difficulties of former times and was more independent over the warmer seasons of the year, at the same time that the business had been cheaper, more favorable, and easier. He tendered his thanks to Mr. Fjord, while he at the same time stated that the older ice-houses constructed by him constantly proved to be practical and good, but at the same time invited him to go on with his experiments, which were of special importance in

proportion as Denmark drew nearer to a market in London, and which Denmark must do its utmost to supply with a fresh article.

After the discussion over Mr. Fjord's lecture had been concluded, Councilor Tesdorff brought under notice the favorable present conjunctures for butter and cheese and the market reports, which show that Danish butter obtained a higher price than Kiel butter, Dutch, or Normandy. He was, therefore, of the opinion, now that the milk exhibition at Holbeck and the judging of the exhibited articles was close at hand, that it would be desirable to take an impartial view of Danish dairies, and there was every reason to direct attention to the instruction given to the dairy hands and to ask the question, if the same promised full security for this country for the maintenance of this valuable product, whether these materials were of that scientific, well-informed, and solid a nature as the dairy business called for. Daily hard and earnest work was necessary, and the hard work sometimes pressed heavily on the young girls. He was of opinion that the society should take up the instruction of dairy apprentices; with their help good materials might be enticed. After having mentioned the difficulty of procuring female pupils for the dairies, the lecturer observed that many good subjects were certainly to be found in dairy employment, but there were also many of inferior description. This point he considered of such importance that he thought it his duty to draw attention to it.

Councilor Valentiner remarked that in his neighborhood there was a want of female dairy pupils. Professor Selecke made mention of the active interest taken by the society in regard to dairy apprentices, which had ceased, as it had not been able to arrive at greater state of perfection than what had been obtained without the co-operation of the society. The need for apprentices was perhaps due to the bad times. If steps were to be taken in that direction, the lecturer could only think it was to be done in that manner that one sought to entice good dairy hands, and not apprentices, to come together, giving them a good theoretical education during a short time. He thought there was more system in the learning that was given in this country and was carried on according to set rules, and with the use of the given material, than was the case in other countries. Furthermore, the landed proprietors themselves were more and more being instructed in this matter, and were, therefore, better able to carry through this system.

Councilor Tesdorff duly admitted this point; also the activity displayed by the dairy assistants; but he did not think there was at present such a system of education that could be said to lead to continued progression. It was necessary that progress should be observable, and that one had not to wait for bad times. He did not think it was from a pecuniary point that the education was prevented; he was rather of the opinion that the cause might be found in the general welfare. He remarked that in Denmark they were more and more drifting to union dairies, because the daughters of the peasant class can do nothing. In his opinion the society should, after careful investigation, make choice of farms for a sort of practical dairy schools. One should not allow this subject to take care of itself, nor leave it to private individuals. Three years was the least time requisite for the proper education of a dairy servant. There ought to be more steadiness and certainty in the education in order to give a security for the future.

HENRY B. RYDER.

UNITED STATES CONSULATE,  
*Copenhagen, March 2, 1880.*

## THE PRODUCTION OF BUTTER IN DENMARK.

*Report (supplementary to the foregoing), by Consul Ryder, on the production of butter in Denmark.*

I have the honor to transmit herewith a *résumé* of a lecture delivered at the Royal Agricultural Society of Copenhagen, on the 19th ultimo, by Docent Fjord, relating to the production of butter in Denmark. I may add that this report contains many valuable instructions hitherto unknown to our dairymen.

Mr. Fjord began by stating that experiments had been made in dairy thrift, and had been carried out partly with the aid of a grant from the treasury of 16,000 crowns, and partly by the voluntary assistance from several landed proprietors. Of those in whose dairies the trials had been carried on he mentioned Mr. Tesdorff, Mr. Valentiner, and Consul-General Pontopitan. He likewise brought under notice the valuable aid which the chemical laboratory conducted by Poly. Cand. Storch had afforded through its researches. He observed that what he would now bring to our notice were solely the results of experiments made in the autumn and winter, and did not include spring and summer, so that these results would not be shown in their entirety. After having set forth the before-mentioned statistical tables to elucidate the normal bearing in the produce of butter, with the ice-water and bucket system in the summer season—namely, with ice, after 10 hours' scumming, 96 pounds of butter, and after 34 hours' scumming, 100 pounds; with water, 90 pounds, and with the bucket likewise 90 pounds—all from the same quantity of milk—he proceeded to speak of the enlarged experiments made in the winter of 1877-'78. His lecture was closely connected with printed statistical tables, which were circulated amongst the audience, and without the aid of which it would barely have been possible to follow the lecturer. As only a minor portion of the figures taken from the inclosed extensive lists of tables are given in the present *résumé*, it would not have been in my power to give a complete report to the Department without these figures.

Docent Fjord dwelt first on the so-called "heavy milk." Experiments relating to this, where, with ice, 60 pounds of milk had been required for 1 pound of butter, while with buckets only 28 pounds of milk had been used for 1 pound of butter, had proved that buckets or shallow pans undoubtedly were more suited to heavy milk; and that which is beneficial to milk in the normal state, namely, a strong and rapid cooling, is of detriment to heavy milk. As, for example, in the case where a bucket is packed with straw in a box so as to keep the milk warm, there only went 32 pounds of milk to 1 pound of butter.

From whence is this heaviness in the milk derived?

It was thought possible that it might be attributed to the fœtus of the conceived animal, but experiments have shown that of the milk of cows which had not calved for one year there was required, with ice, 69 pounds of milk to 1 pound of butter; of other cows' milk, with ice, 51½ pounds of milk to 1 pound of butter; in tubs, 32 pounds of milk to 1 pound of butter. Therefore, it could not be due to the fœtus, because milk of cows which had not calved for one year was heavier than the other. On the contrary, it had been proved that from newly-milking cows' milk, with ice, there only went 28 pounds of milk to 1 pound of butter; of other cows' milk, with ice, 55 pounds of milk, and in tubs,



30 pounds of milk to 1 pound of butter. The normal proportion was thus evidenced, and it has been proved that it was the cows of longer milking that gave the heavy milk. This was further shown by experiments carried on at the Gjdser, where, from the milk of cows of longer milking, there went to 1 pound of butter, after 10 hours' scumming, 64 pounds of milk, with ice, and after 34 hours' scumming 58 pounds; and in tubs only 33 pounds of milk. These experiments were carried on from November 30 to December 13.

Experiments made at Ourup had shown that the same quantity of milk from cows of longer milking had given, with the ice system, 100 pounds of butter; with water, at a temperature of  $7\frac{1}{2}^{\circ}$ , 110 pounds; but with tubs, 151 pounds; and from newly milking cows, respectively, 100, 92, and 101 pounds of butter. The lecturer thus laid it down again as a settlement of the main points that that which benefited the milk from newly milking cows (namely, the ice system) was injurious to the milk from the longer milking cows. This was further corroborated by comparative tabular figures of butter produced, according to which the same quantity of milk from longer milking cows, with a temperature in the dairy-room of  $2\frac{1}{2}^{\circ}$ , in tubs, produced 100 pounds of butter, and with a temperature of  $5^{\circ}$  in the dairy, 104 pounds of butter, while from newly milking cows, respectively, 100 pounds and 95 pounds. If it were asked whether it were desirable to have warmth in the dairy-room, it must be answered with regard to the milk from longer milking cows by "Yes"; for milk from the newly milking cows with "No." Another of the statistical tables shows that the milk from the longer milking cows from the farm "Beuzonsdahl," and two neighboring estates, throughout the winter has been heavy.

Thereafter he came to statistics, giving explanation of experiments of fodder with reference to heavy milk. From this it would appear that after feeding with cake-fodder, field and meadow hay, oat and barley straw, cake-fodder soaked in buttermilk, no change of any consequence had occurred in reference to the yield of butter. The milk continued heavy and yielded much more butter by the tub than by the ice system. But as soon as the cows are turned out to grass, a change takes place. The ice system produced the greatest yield, and the heavy milk ceased, the ice giving 100 pounds of butter, the tubs 98.

The lecturer then proceeded to the second part of his discourse, which had reference solely to the centrifugal experiments. First he gave some general illustrations of the centrifugal system, whereby, amongst other things, it appeared that with a greater rapidity of movement there was obtained through this system a constantly more rapid separation of the cream. With accompanying models, with which he experimented, he was enabled in a very distinct manner to give his hearers a very clear insight into the working of the centrifugal system. He then dwelt upon the different descriptions of centrifuges. In the next following experiments only Lebfeldt's centrifuge was used to 204 pounds of milk, one stroke answering to nine evolutions. He first spoke of the careful experiments with the centrifuge, which had given most satisfactory results. Thereafter he spoke of experiments that had been made, showing what effects a difference in the rapidity of turning had produced. With 112 strokes to the minute, the yield of butter had been 100 pounds, with 94 strokes 92 $\frac{1}{2}$  pounds, and with 80 strokes 86 $\frac{1}{2}$  pounds.

Next he spoke of the significance arising from a difference in the time the centrifuge worked.

Trials had been made at "Slagelse," and it had there been proved that with the same rapidity, namely, 104 strokes to the minute, equal to about 900 evolutions, the yield of butter, after a lapse of 20 minutes, was 89½ pounds; after 30 minutes, 100 pounds; and after 40 minutes, 106 pounds. Another trial, where all the cream was churned, whilst with the former only one-quarter of the cream had been churned, nearly the same results were obtained, and it was clearly proved that it was useless to allow the centrifuge to work more than 40 minutes, because after a lapse of 40 minutes' time cream lumps were found in the skimmed milk.

From a similar trial between Lehfeldt's and Winstrusse's centrifuges, of which the first is calculated after a greater, the other a lesser, rapidity, it was shown that any centrifuge, equally calculated at small rapidity and less time, is an impossibility.

He therefore went over to the third part of his lecture—a comparison between Lehfeldt's centrifuge with the ice and tub systems. In experiments made at the Copenhagen Milk Supply with milk which had been cooled and driven to Copenhagen, it was shown that with the centrifuge, after 30 minutes' turning, the yield of butter from the same quantity of milk had been 100 pounds; with ice, 35 pounds after 10 hours' scumming and 47 pounds after 34 hours' scumming; and with tubs, 86 pounds. But when the milk, on the other hand (previous to driving), had been at once placed on ice at "Beuzonsdahl," it had yielded 63 pounds of butter after 10 hours' scumming, and 78 after 34 hours'; and with tubs, 97 pounds. It was therefore evident that a great loss in the yield of butter was caused by driving and previous cooling.

Experiments carried on during October and November in the Union Dairy (Busk & Co.), at Slagelse, gave the following average results: With the centrifuge system, 104 strokes or 900 evolutions in the minute, with a period of 30 minutes, 100 pounds of butter; with ice, after 10 hours' scumming, 88 pounds; after 34 hours', 87½ pounds. To 1 pound of butter were respectively used 30 pounds of milk (with centrifuge), 34 pounds, 32½ pounds, and 34 pounds.

He then came to the experiments made at Annö. These were made every morning and evening in the month of February, partly with milk from the farms, and partly with milk bought at the Union Dairy. The average result obtained with the milk from the farms was, with the centrifugal system, 100 pounds of butter; with ice, after 34 hours' scumming, 89 pounds; and with tubs also 89 pounds. The quantity of milk used for 1 pound of butter was, respectively, 29, 32½, and 32 pounds. With respect to the bought milk, the centrifuge gave 100 pounds of butter, ice 85 pounds, and tubs 84 pounds; and to 1 pound of butter there went, respectively, 26, 30, and 31 pounds of milk.

From these figures it will be seen that ice and tubs gave nearly similar results. The milk thus experimented upon was not heavy. In the month of March the experiments gave a somewhat less favorable result for the centrifugal system, which arose solely from a less rapidity in the evolutions.

He now proceeded to the last point of his lecture, which embraced the analyses partly of butter and partly of buttermilk. These analyses should reply to the question why the centrifugal system gave a larger yield of butter. Here it was mainly of importance to have decided if the reason could not be of that doubtful nature that water and other elements which should not be there were in the butter. The analyses had fully dispelled any such fear; because, in 3 pounds of butter, there

were detected by the centrifuge 45 quints of water, or about one-half pound; with ice, 47 quints; and with tubs also 47 quints of water; of other elements were respectively found 4, 5, and 5 quints of fatty matter in buttermilk. From 100 pounds of sweet milk were found with the centrifuge 9 quints, with ice 9 quints, and with tubs 15 quints. It was thus evident that the reason of a greater yield from the centrifugal system was due to the fatty substance being therewith better separated than by the other systems.

It was further shown by analysis made with skimmed milk that with Winstrasse's centrifuge (less rapidity) there had been of fatty substance in 100 pounds of skimmed milk in the extreme end of the cylinder partition after 15 minutes 49 quints, after 30 minutes 28 quints, and after 60 minutes 24 quints. The remainder of the milk had contained 37 quints of fatty matter. Lehfeldt's centrifuge had even given better results; so that the fatty matter with diverse analyses after thirty minutes' turning had been 22 and 21 quints to 100 pounds of skimmed milk. This was a more favorable result than had ever been given by the ice system, as in the same connection with these good results the fatty matter was 29, 42, and 47 quints; which figures, however, it must be observed, were given by analyses made in the summer season. On one single day in October 100 pounds of skimmed milk, at the Milk Supplying Company of Copenhagen, had shown a fatty substance of 3 pounds and 28 quints. The milk was treated by the ice system, and the result told, as the lecturer jokingly remarked, in a high degree of favor of the skimmed milk from the Milk Supplying Company. He further added that the foregoing analyses on the whole had given very comforting results, as, during all the three years in which the experiments had been carried on, scarcely any difference had been shown between the experiments and the analyses. Finally, he said that the centrifuge had not performed its work better in winter than the ice dairy in summer. No positive result could be arrived at before the centrifuge had also been worked in summer. As regards the winter season, all the before-mentioned results were conclusive and in a high degree in favor of the centrifuge; but as to how far it would pay to use it he left to the farmers to answer.

Mr. Tesdorff returned thanks to Docent Fjord for his lecture on the extended experiments he carried on during the past year. He strongly dwelt upon the importance to farmers of the different results obtained by Mr. Fjord "*in times like the present*," when it is necessary to exhaust every resource to the last drop. He next made the remark that it might possibly be of advantage during the season of the year when there was only milk from the longer-milking cows exclusively to use tubs for the heavy milk. In conclusion, he expressed it as being his conviction that the Danish Chambers and Government would moreover be proud to vote the necessary funds for Mr. Fjord's experiments.

I may be allowed to remark that the foregoing report is as complete as it was possible for me under the circumstances to obtain. The lecturer spoke in the Danish language, and there were many difficulties to overcome both as to this and the short-hand writing.

HENRY B. RYDER, JR.

UNITED STATES CONSULATE,  
Copenhagen, April 28, 1879.

## FRANCE.

## LYONS.

*Historical report, by Consul Peizzotto, on the industries and manufactures of Lyons and the department of the Rhone.*

The department of the Rhone, in which the city of Lyons and this consulate are situated, takes its name from the grand river which bathes its eastern shores. It was organized in 1793 from the oriental portion of the Rhone and Loire departments. Two ancient provinces concurred in its formation—the Lyonnais, by more than 325,000 acres; the Beaujolais, with nearly 240,000 acres. It covers to-day about 565,000 superficial acres.

The department belongs to the region of the southeast. One single department, the Ain, separates it from Switzerland, and two departments, the Isère and Savoy, from Italy. Lyons, which to France is what Manchester is to England, except that silk and not cotton is its staple article, is the capital of the Rhone department, lying 317 miles south-east by rail from Paris, 63 miles from Switzerland, and about 95 miles from Italy.

The department is almost entirely formed from mountains which fall in an eastern direction toward the large and fertile plains of the Saone and the Rhone. These mountains have but a medium height, but they are important as a line of demarcation between the Rhone and the Loire; in other words, they separate the rivers which diverge towards the Loire and those which descend towards the Rhone, and there is in the department a number of townships, which are divided by the two basins. Among these streams some run with the Loire and are lost far away in the Atlantic, while others reach the Mediterranean by the Rhone. The Rhone, though not the longest of the rivers of France, the Loire exceeding it in this respect, is first in rank for the great volume of water it carries to the sea. It flows with great velocity through Lyons, passing the beautiful bridges which separate the principal business portion from the eastern quarters, and receives the Saone just below the great railway station of Perrache. The Saone, which, winding its course on the west, separates those districts of the city called the city proper, and the Croix-Rousse from the Fourvière, presents a charming aspect from the numerous monasteries, chateaus, villas, and churches which crown its heights, while its numerous bridges, some of solid masonry, others suspended by iron cables, light and ethereal as the marvelous fabrics of the city, make up a scene of rare and striking beauty.

Being very mountainous, the climate of the department as also of the city is exceedingly variable, even differing in degree in the same district and arrondissement. The higher elevations are naturally colder, snow covering the mountain tops throughout the year, while the low-lying portions are close and heavy in temperature; but, though the winters are cold and the summers are very warm, the average or general mean is temperate.

The average temperature of Lyons during the year is  $11\frac{1}{2}^{\circ}$  to  $12^{\circ}$  Réaumur, about one degree superior to that of Paris. The average for winter is  $2^{\circ}.3$  and for summer  $21^{\circ}.11$ ; spring,  $10^{\circ}.9$ ; autumn,  $12^{\circ}.84$ . Rains are frequent and fogs of common occurrence and often very dense.

Before the Roman conquest, the territory which now forms the department of the Rhone was covered with dense forests and inhabited by a tribe known as the Segusiaves, who were finally subjected by the Arvernes and the Eduens, powerful confederations who disputed the supremacy of ancient Gaul.

Forty-one years before Christ, the consul Lucius Munatius Plaucus founded upon the plateau upon which are now situated the old church and new and rapidly constructing cathedral of Fourvière, just above the confluence of the Saone and the Rhone, a Roman colony. Lyons thus first received the Gaelic name of Lugdunum, and was so favorably situated that it speedily obtained considerable development.

Agrippa made the city the point of junction of the four great highways which he ordered to be constructed for traversing the whole of Gaul.

The Emperor Augustus sojourned three years in the palace where later the emperors Claude and Caracalla were born.

Aqueducts (see Appendix I) introduced water from the surrounding country; temples and a theater were erected, and the city, hardly yet founded, became the pacific rival of Rome and the capital of the Celtic Roman province, which soon took the name of Lyonnais.

The Emperor Claude accorded numerous privileges to the inhabitants. Entirely destroyed by fire under the reign of Nero, 59 years after Christ, the city rose from its ashes more beautiful than ever.

In the year 102, the emperor Trajan erected a grand edifice, the *Forum Vetus*, the name which later by a corruption was transformed to that of Fourvière. This forum fell in during the year 840.

Adrian and Antonin established annual fairs, which increased considerably the commerce and prosperity of the city.

Christianity, preached by an apostle from Greece, Saint Pothin, made numerous proselytes in Lugdunum. Their first persecution took place under Marcus Aurelius, and the apostle of the new faith succumbed as its first victim, and numerous women and children were sacrificed with him. Twenty years later the emperor Septimus Severus delivered the city to flames and blood in punishment for its having sustained the claims of Albinus, his competitor, to the empire. Saint Trénée and 18,000 Christians perished in these massacres.

When the Roman power, divided in the interior and pressed at the exterior by floods of barbarians from the north, fell, the Burgundians became masters of Lyons, and in the year 478 made the city the capital of their kingdom.

Conquered by Clovis in 500, and the Burgundian king made a tributary, the two sons of Clovis, Clotaire and Childebert, continued the work of their father, and in the year 558 Clotaire added the vanquished country to the rest of the French monarchy.

In the eighth century the Arabs, masters of the south of France, seized Lyons and delivered it to fire and pillage, but, at the bloody battle of Poitiers, Charles Martel crushed these formidable invaders.

Under Charlemagne, Lyons was raised from its ruins, and at the death of that great monarch made the capital of Provence, becoming later (1024) a fief of the German Empire.

Intestine struggles marked the next epoch in its history, until, in 1209,

Saint Louis put a term to these quarrels and united the territory and the city of Lyons to the Crown of France.

From the commencement of 1320, the manufactures and commerce of Lyons, favored by complete liberty, increased very largely. The wars of Italy caused emigration to the city not only of master workmen in silk and gold fabrics, but great capitalists, who engaged immediately in these manufactures. The exhibitions instituted by Charles VII, and organized by Louis XI, augmented still more the prosperity of Lyons, making it in fact, during the fourteenth, fifteenth, and sixteenth centuries, one of the most important centers of France, distinguished for its marvelous fabrics of silks, its cloths of gold and silver, its printing-presses, its hat factories, and its tanneries.

The Italian wars, so ruinous in general to France, exceptionally favored Lyons, which became for a long time the seat of the royal court, but the defeat of Francis the First at Pavia all but ruined the flourishing city.

After many encounters between the Catholics and Protestants of Lyons, the news of the massacre of Saint Bartholomew, which occurred at Paris August 24, 1572, brought on the last and most sanguinary explosion. More than 1,000 Protestants were treacherously slaughtered by the fanatic populace.

In 1594, Lyons, weary of fratricidal strifes, which so long had ensanguined France, declared for Henry IV, and on his entrance into the city gave him a splendid reception. The city again suffered, in 1685, the loss of a large part of her inhabitants by the revocation of the edict of Nantes, which suppressed liberty of conscience and forced from France the emigration of more than 300,000 Reformers.

In the eighteenth century a frightful inundation, riots of workmen, occasioned by their overwhelming misery, and great fires marked the calamities of Lyons; as a compensation, however, the discoveries of science and new appliance for manufactures gave a special impetus to the industry which had pre-eminently distinguished her among the cities of the world.

During the revolution, Lyons, which had risen against the convention, was subjected to terrible scenes, the death of Robespierre alone arresting the massacres and devastations to which it had been prey.

Under Napoleon I, Lyons was once more restored. Jacquard, in 1802, invented the loom which bears his name and which was destined to exercise so mighty an influence upon the manufacture of silk goods.

The defeat of the Emperor caused a foreign invasion, and Lyons was occupied by the Austrians March 21, 1814. A year later, Napoleon, escaping from Elba, entered the city with his small but enthusiastic army; but, vanquished at Waterloo, France was again overrun with foreign foes and Lyons reoccupied by an Austrian army.

#### LABOR RIOTS.

Lyons has often been the scene of what we at home call "strikes," and sometimes these have been sanguinary and terrible.

In 1829 the city gave a grand ovation to America's early friend and her own incomparable hero, Lafayette. The news of the revolution of July was received with joy by the majority of the population. The change of government was accomplished without the loss of a single drop of blood. Unfortunately a commercial crisis occurred soon after, and several great manufacturers refused to submit to the new tariff of wages which had been prepared with the approbation of the city author-

ities and accepted by a large number of fabricants. The workmen rose in an insurrection on the 21st of November, 1831, raised the black flag bearing the inscription, "*Life with work or death in combat*," and, crying "*Work or death*," engaged in bloody encounters in which they secured the victory. They restored order and respected property, but, divisions speedily springing up between them, their efforts resulted in nothing. On the 3d of December the Duke of Orleans and Marshal Soult, at the head of a numerous army, took possession of the city, which had been evacuated by the garrison. The new tariff failed to be enforced, the national guard was dissolved, a strong garrison replaced that which had retired, and forts were erected on all sides of the city.

In 1834 a new insurrection broke out. This time it was not only industrial, but political. The society of the "Rights of Man" espoused and made common cause with the "Mutual Society." The struggle was long, bitter, and disastrous, the number of dead and wounded on the side of the troops and the insurgents exceeded a thousand, and several quarters of the town were entirely destroyed by cannon.

Scarcely had the traces of this civil war been effaced when a terrible inundation occurred, causing the most frightful ravages, the marks of which still remain visible in some sections, and are recorded by stone tablets in others. The faubourg of Vaise was almost entirely carried away by the waters of the Saone. It was necessary to navigate in boats in a great part of the city. The Rhone and the Saone mingled their waters upon the Places Bellecour and Prefecture.

But the flood of 1856 proved even more disastrous. On the 18th of May the Saone rose to such height as to invade the city from the Place Terreaux to Bellecour. On the 21st it reached its maximum elevation and then fell, to rise again on the 30th.

Unfortunately the Rhone also took formidable proportions, flooding the levee of Tête d'Or and inundating the quarters of the Charpennes, the Brotteaux, and the Guillotière. Numerous houses were swept away with many of their tenants. Twenty thousand people were forced to encamp upon the ground far away to escape the deluge. The losses sustained were enormous. Happily the cries of the unfortunate evoked succor from all quarters, even distant countries contributing their assistance. To guard in future against such calamities, the most splendid and substantial stone quays, 38 kilometers in extent, have since been erected on both sides of the majestic rivers which lave its shores, and serve now as ample defense against all possible inroads of the watery element. These quays, planted with avenues of trees, form lovely promenades surrounding the whole city, and in extent and architecture surpass those of any city of the world.

A moment troubled, in 1849, by an *émeute* in the working quarter of the Croix-Rousse, but speedily suppressed, Lyons was again subject to the trying period of the war of 1870-71. After Sedan it was several times on the point of passing through anarchy and civil war. The popular passions, but imperfectly repressed during the war with Germany, at length burst forth into an explosion, fired, no doubt, by emissaries from the Paris Commune. On the occasion of the elections on the 30th April, the streets of the Guillotière quarter witnessed several bloody scenes, but these were of short duration, owing to the energy of the troops, and on the following day order was completely restored.

Under the present government of the republic, Lyons has been perfectly tranquil, and nowhere in all France has it motto, "Peace and Labor," been more joyously hailed as the true glory of an enlightened and civilized nation.

## POPULATION.

According to the census of 1876, the population of the department was 705,131, composed of 346,560 males and 358,571 females (an excess of the latter sex of 12,011).

From this point of view the department ranks the sixth of France. These figures, divided by those of hectares, give 253 inhabitants to each 100 hectares (an hectare is two acres, one rod, thirty-five perches), or the square kilometer (a kilometer is five-eighths of a mile), showing thus the specific population. France entire, counting 69 to 70 inhabitants to the square kilometer, it will be seen that the population of the Rhone department is very much above the average of the country. Since 1801, the date of the first official census, this department had gained 405,573 inhabitants; thus it has nearly doubled.

The population of Lyons (census of 1876) was 342,815.

Lyons consumes 55,592,000 kilograms of bread; 27,185,000 kilograms of meal; 826,700 hectoliters of wine; 10,600 hectoliters of alcohol; 24,800 hectoliters of beer. It is curious to note that Lyons consumes more wine than all England, which absorbs but 350,000 hectoliters.

## LANGUAGE.

In Lyons the national tongue is only spoken. In the rural districts the *patois* prevails, marking thus the transition prevailing between the north, or *langue d'oïl*, and the idiom of the south, or *langue d'oc*. Descending the valley of the river, the language becomes more meridional in form, termination, and accent.

## RELIGION.

The predominant religion is the Catholic. The last census gave 658,986 Catholics and only 5,885 Protestants, and 866 Israelites.

There is a neat English chapel and a very handsome synagogue. Public schools are gradually superseding the Catholic or ecclesiastical, and education slowly but surely taking broader dimensions.

The city has a number of magnificent churches besides the cathedral of Saint Jean and the rapidly rising Fourvière, the latter occupying one of the highest and most superb situations of any church in the world, commanding a view of Mount Blanc, eighty miles away. The gothic architecture of Saint Nizier is particularly remarkable.

## MORTALITY.

The average life of Lyons is only 31 years and 11 months. The number of deaths exceeding births for the week ending September 6 of this year was 49. This may be exceptionable, but I have been constantly struck with the excess of deaths over births, particularly when counting the still-born, which average weekly from 10 to 12, showing the existence of infanticide to a terrible extent. Yet the published statistics give more births than deaths, as, for example, for the year 1875, births, 16,871 (plus 937 still-born); deaths, 12,893; marriages, 6,406. Consumption, congestion of the brain, rheumatism, and throat diseases are the predominant causes of death.



## EDUCATION.

The census of 1872 showed the following results in this department:

Unable to read or write.....	135, 503
Able to read only.....	74, 963
Able to read and write.....	455, 288
Those whose state of instruction could not be verified.....	4, 493

Total of civil population..... 670, 247

The department possesses 1,057 schools; 514 lay, 543 clerical. The number of pupils is 83,263, divided as follows: 41,021 boys, 42,241 girls.

A separate report on education will be given later. (See Appendix III.)

## AGRICULTURE.

In round numbers the 279,039 hectares of the Rhone department are divided as follows:

Arable lands.....	116, 000
Meadow.....	49, 000
Vineyards.....	38, 000
Woods or forests.....	36, 000
Marshlands.....	27, 000

The balance is composed of sites for cities, towns, villages, roads, river lands, &c.

The vine is cultivated more successfully than any other product. The principal wine is the Beaujolais.

## RAILWAYS AND ROADS.

The department possesses and is traversed by the following railways and public roads:

	Kilometers.
Eight railways.....	217
Six national roads.....	227
Nineteen department roads.....	397½
2,121 cross roads.....	4, 496
Two navigable rivers.....	123
Two canals.....	9

France entire has at present in operation 23,000 kilometers (14,375 miles) of railways. The legislative assembly recently voted the construction of 17,000 kilometers (10,625 miles) additional railways.

Freight cars are enormously deficient and the stations are like warehouses, with their immense accumulations of freight.

While many improvements have been introduced on the main lines, particularly on the Paris, Lyons and Mediterranean, both in passenger and refreshment stations, and the running of rapid trains, essential necessities are still wanting, and sleeping cars, few in number, are provided only at exorbitant charges. The tariff of freight for first-class merchandise from Lyons to the principal maritime outlets is as follows:

To Havre, express freight, 35 francs the 100 kilograms; time, 2 days.  
To Havre, slow freight, 12.50 francs the 100 kilograms; time, 10 to 11 days.

To Bordeaux, express freights, 31 francs the 100 kilograms; time, 2½ days.

To Bordeaux, slow freight, 11.50 francs the 100 kilograms; time, 12 to 13 days.

To Marseilles, express freight, 18 francs the 100 kilograms; time, 1 day.

To Marseilles, slow freight, 5 francs the 100 kilograms; time, 5 to 6 days.

#### MANUFACTURES AND COMMERCE.

The department of the Rhone is especially industrial. Its commerce embraces all commodities, but its industry, however largely extended and varied, has three specialties, which has given it a world-wide reputation. These are its chemical productions, its manufacture of machines, and, above all, its silk manufactures. The manufacture of silk stuffs, introduced by the Italians in the fifteenth century, forms the most considerable branch of the Lyonnaise industry and commerce.

The number of houses, large and small, engaged in silk manufactures reach to nearly 600. Besides these, there are some 80 houses engaged in the raw-silk trade, and about 60 commission firms whose business extends to all countries of the globe. The manufacture of silk tulles, owing to a newly-perfected loom, has regained its old favor, and is largely extended. Silk handkerchiefs (*foulards*) are exquisitely manufactured, and command orders from every country. Trimmings (tissues of silk with gold and silver in particular) are here produced superior to any market in the world; 800 looms are constantly engaged in this production. Church regalia, altar cloths in silk and velvet, wrought with gold, silver, and jewels, military and masonic banners, flags, emblems, and trimmings are unrivaled in their production.

There are 80 dyeing establishments, employing 6,000 workmen. Among these several are pre-eminent for the perfection of their dyes and the extent of their works. One establishment which I have visited employs over 2,000 workmen, and it would be impossible to describe, in the limits of this dispatch, the wonderful combinations of color made use of, the many details of treatment, and the variety of processes to which silk is subjected to arrive at that perfection of tint and durability of color which have made the dyes of Lyons so celebrated. There I witnessed goods sent from every country of the globe to be dyed.

Not less renowned are the *appreteurs*, or finishers and dressers of silk, and the number of these factories is very large.

Lyons purchases on the average from 350,000,000 to 425,000,000 of francs of the raw silks of France, Italy, the Levant, India, China, and Japan, and exports 450,000,000 to 500,000,000 of francs of goods manufactured therefrom or mixed with wool and cotton, being about three-fourths of her entire production. Great Britain and the United States are the principal markets for these exports. The trade of cotton and woolen stuffs exceeds 20,000,000 francs.

The iron manufactures and machine and mechanic shops employ 9,000 men. About 140,000,000 pounds of cast iron and 35,000,000 pounds of Bessemer-Martin steel is the product and 60,000,000 of francs the value of the metallic production of Lyons.

The value of the chemical productions exceeds 50,000,000 francs per annum.

To enumerate all the trades would consume too much space; they may be summarized thus: Silk cocoon spinning; machine shops; copper, bell, and bronze founderies; silversmiths; goldsmiths; imitation jewelry (production 8,000,000 to 9,000,000 francs); paper hangings the most extended and varied, and in production second only to Paris; 15 chemical works; tanneries; besides the all but innumerable ateliers or workshops of the dexterous operatives (*ouvriers* and *ouvrières*) in silk and velvet goods, number and extent described and particularized in my last annual report. In addition to the foregoing manufactories, ateliers, shops,

&c., properly located in Lyons, there are in the department of the Rhone the following establishments, several of which enjoy great renown.

At Tarare the velvet and plush, linen, muslin, Indian cotton, the embroidery, hemp, and leather-finishing factories and shops are located; at Amplepuis handkerchiefs and cottonades; at Thizy linen and cotton cloths and cottonades; at Cours 2,000 workmen are employed in the manufacture of cloth for furniture, &c., bed covers and blankets; at Beaujolais the renowned linen cloths; at Givors glass-works, employing 800 workmen, &c.

Lyons is also celebrated for sausages and macaroni, exported often as Italian, and preferred by some to the renowned qualities of Italy. In marrons or chestnuts confectioned the quantity is enormous, the size and quality unsurpassed, and the export very large.

The department consumes about 8,000,000 *quintaux metrique* of coal, derived almost entirely from the mines of St. Etienne and the valley of the Gier.

BENJ. F. PEIXOTTO.

UNITED STATES CONSULATE,  
Lyons, October 1, 1879.

#### APPENDIX I.

##### *The water supply of Lyons in ancient times and at present.*

The *Lyon Medical* (the official organ of the medical society of the city) published in its issue of September 7, 1879, an article upon this subject, of which I have made the following translation:

The water supply of Lyons (or Lugdunum, as it was called by the Romans) was secured by four aqueducts (perhaps five with the aqueduct of Craponne), representing a total length of conduits or canals of 150 kilometers, of which not less than 125 kilometers have been recognized, upon the length of which there were 3,000 meters of bridges, 27 meters in height, and 5,000 to 6,000 meters of arches or ramparts for siphons or water-spouts.

The volume of water carried every twenty-four hours was not less than 80,000 cubic meters for the first three aqueducts alone. This volume reached a level as high as for a thousand cubic meters of the service of to-day.

The chemical and physical quality equaled the ideal of that which has ever been conceived. This luxury of water was enjoyed by a population which at the time did not exceed 50,000 to 60,000. The distribution in consequence gave from 14,000 to 15,000 liters or quarts to each inhabitant.

At the present time at Lyons the water supply is furnished by steam, which draws the water from the Rhone into the filtering corridors established in the graviers or sands on the right bank of the river. The filtered water is limpid, of good quality, highly ventilated, and very rich in carbonic acid. It marks 13° hydrometrique. Its temperature rises to 18° and 20° during the great summer heats. The filtering galleries furnish but 28,000 to 30,000 cubic meters of filtered water per diem, and as in summer the consumption rises to 50,000 and 55,000 cubic meters a day, recourse is necessary for the deficiency to the Rhone directly, from whose more or less troubled waters it is drawn at a temperature of 24°. The average daily distribution, being 39,700 cubic meters, gives to each inhabitant of Lyons about 115 liters or quarts, twelve times less than was afforded by ancient Lugdunum. It will consequently be remarked (with the enforced admixture) that for purity and freshness the actual quality is very much behind, while for quantity the insufficiency is notorious both for manufacturing purposes and for sanitary demands, while for sewerage the public service has but a third of the quantity absolutely required.

REMARKS.—The foregoing comparison is subject to criticism, in point at least of the actual daily supply. This, according to exact figures which I have obtained, is as follows:

	Cubic meters.
1. Ordinary service .....	65,000
2. Average service .....	14,000
3. Superior service .....	5,000
Total daily supply .....	84,000
Even this supply, however, is inferior to the actual needs,	

## APPENDIX II.

*The silk industry of Switzerland.*

The silk manufactories of Switzerland are grouped principally around Zurich, for tissues, and Basle, for ribbons. They occupy about 31,000 looms, the annual product of which has a value of 130,000,000 to 160,000,000 francs. The ribbon-making at Basle was introduced into the canton at the time of the revocation of the Edict of Nantes by refugees from Lyons and St. Etienne, whose descendants still form a part of the town. In 1810 the canton possessed from 500 to 600 ribbon-looms, which produced at least \$2,000,000 worth of goods per annum. In 1830 the figures had doubled, and in 1872 this trade attained its highest development. Then out of a total value of silk-ribbon manufacture in Switzerland of \$13,000,000, the share of Basle alone was \$12,000,000. About the same period the number of ribbon-looms rose in Switzerland to 9,156, of which 7,562 were in the canton of Basle, and 1,594 in other parts of the Swiss Confederation. It is calculated that the 7,562 looms of Basle occupy 6,000 work-people of both sexes and 60 designers; they consume 400,000 kilograms of prepared silk, and produce 125,000,000 meters of ribbon. According to statistics published with reference to the new federal law on labor in factories, the silk trade of Basle in 1875 only turned out ribbons to a total value of \$9,000,000. In 1876 the total shipments of silk ribbons and tissues to the United States exceeded \$1,000,000.

From Zurich the exports to the United States of silk goods exceeded, for the same period, \$4,000,000. No reference is here made to the other exports, allusion being had only to silk fabrics.

## APPENDIX III.

*State of instruction at Lyons and in the department of the Rhone, 1878-79.*

Public instruction in France has so long been confided to priests that it is only by herculean efforts the youth of the country are being rescued from a system which, as a rule, has dwarfed the intellect, narrowed its intelligence, and subjected it to superstitious imagination. The object of the government in seeking to place public education under the control of the state is simply to extricate the country from this system, which, under the name of religion, has retarded that broad and enlightened development indispensable to a people who would and who should exercise the principle and the power of self-government. The struggle now going on in this country must be watched with keenest anxiety by all who would see the happiness of the human family still more promoted and advanced, and in our own land, where separation of church and state is so absolute, and where any attempt at reunion would be resisted to the end of deadly contest, the present agitation in France must excite especially vivid interest.

There are in the department of the Rhone 1,057 schools—418 situated in Lyons and its faubourgs, and 639 in the town and rural districts.

Dividing these under heads of the lay and clerical instructors, I find that 514 may properly be called public and 543 clerical schools, or those in which priests are the instructors.

The number of pupils is 83,262, of which in the schools of Lyons are 37,720, and in those of the rest of the department 45,542; of these the sexes are divided as follows: Boys, 41,021; girls, 42,241; total, 83,262.

Twenty-eight per cent. of the pupils alone are obliged to pay, leaving thus 72 per cent. who receive gratuitous instruction.

The attendance at the schools is divided as follows:

Lay schools: Boys, 22,456; girls, 11,500; total, 33,956. Clerical schools: Boys, 18,565; girls, 30,741; total, 49,306; aggregate, 83,262.

It is to be observed, as will be seen from the above, that while the female sex still continue to be under clerical influence, the male is gradually passing from under such, the increase over 1877 of attendance at the lay schools having been 2,836.

The average attendance at the public schools is not more than two-thirds for the school year, and does not exceed seven and one-half months upon eleven.

Though 1,759 children of an age to attend is given as the figure of those not attending any school, I think this number far too low. Compulsory education is, however, recognized, and fresh legislation necessary to enforce this measure is already under consideration.

The number of teachers employed for all grades is 1,712 for the public schools, of whom hardly one-half are lay, the rest being clerical. Night schools for adults are few and poorly supported, the attendance being, males, 3,343; females, 925; total,

4,268. In a great manufacturing city like Lyons, the necessity for these schools is only too apparent, and efforts are being made to secure adequate appropriations for their maintenance. The school premises of the department, especially the primary-school quarters, are, as a rule, sadly deficient if not contemptible. As a whole, public instruction is beginning to make headway, and the future is encouraging.

BENJ. F. PEIXOTTO.

UNITED STATES CONSULATE,  
Lyons, October 1, 1879.

## GERMANY.

### THE GERMAN TARIFF.

*English translation, by Consul-General Kreissmann, of Berlin, of the German tariff act and customs tariff, approved July 15, 1879.*

AN ACT in relation to the customs tariff of the German customs territory and the revenues from customs and from taxation of tobacco. (Approved July 15, 1879.)

SECTION 1. On imported goods duties shall be levied in accordance with the subjoined tariff, which shall be in lieu of the customs union tariff of the 1st of October, 1870, and the act amending the same, approved July 7, 1873 (Bulletin of the Laws of the Empire, page 241).

This act shall take effect—

First. Immediately as to the following tariff numbers, viz, No. 6 (iron, &c.), No. 14 (hops), No. 15 (instruments, &c.), No. 23 (candles); also as to the articles contained in No. 25 of the tariff (groceries), with the exception of those articles designated in the item *g* 2 of said No. 25; likewise as to the articles coming under No. 26 *c* of the tariffs (fats), and as to No. 29 (petroleum), No. 37 (animals, &c.), and No. 39 (live stock);

Second. On the 1st of October, 1879, as to the articles contained under No. 9 *d, e, f* (grain, &c.), and No. 13 *a* to *f* (wood) of the tariff;

Third. On the 1st of July, 1880, as to No. 8 of the tariff, flax and other vegetable spinning materials, with the exception of cotton, raw, dried, broken, or heckled; also as waste;

Fourth. On the 1st of January, 1880, as to the remaining articles enumerated in the tariff, including those hereinbefore excepted in the first clause.

SEC. 2. Duties by weight shall be collected from the gross weight—

*a.* Whenever the tariff shall expressly so provide;

*b.* When the duty on the goods does not exceed 6 marks on 100 kilograms. Otherwise the duties by weight shall be levied on the basis of the net weight.

In ascertaining the net weight of liquids, the weight of their immediate receptacles (casks, bottles, jars, &c.) shall not be deducted. As regards sirups, the present existing regulations shall remain in force.

For the other kinds of goods the percentage of the gross weight, according to which the net weight shall be computed, shall be prescribed by the federal council.

SEC. 3. The federal council shall have power to provide that the ascertainment and liquidation of duties on the goods embraced in the items No. 2 *c* and 22 *a, b, e,* and *f* of the tariff shall occur at such custom-houses only as may be designated for the purpose, unless the parties concerned shall be prepared to pay the highest rates of duty prescribed in said item.

**SEC. 4. Duty-free shall be—**

a. Packages of goods imported from abroad by mail, weighing 250 grams and less, gross weight.

b. All goods subject to duty by weight in quantities of less than 50 grams. Duties of less amount than 5 pfennige shall in no case be collected; duties of greater sums shall be collected only to the extent as said sums can be divided by 5, omitting any excess in pfennige. The federal council shall have power in all the premises herein set forth to impose local restrictions in case of abuse.

**SEC. 5.** The following articles shall remain free from duties of import provided the conditions precedent for the exemption of the same from duty shall exist:

First. Products of agriculture and of live-stock raising, derived from such premises located beyond the limits of the customs territory, as shall be managed from dwelling-houses or farm buildings situated within said limits, under like conditions; also the products of forest-culture, provided the premises situate beyond the limits of the customs territory form a part of the premises within the same.

Second. Wearing apparel and clothes already used and not imported for sale; household utensils and effects already used, factory implements and tools already used, of persons arriving in the customs territory, and when intended for like purposes by said persons; by special permission, also, new wearing apparel, clothes, and effects, so far as the same constitute articles with which persons from abroad have furnished themselves, who, by reason of their marriage, may take up their abode in the country.

Third. By special permission, also, household utensils and effects already used, when obtained by inheritance and imported upon proper evidence to that effect.

Fourth. Traveling effects, wearing apparel, clothes, &c., which travelers, drivers of vehicles, and sailors carry with them for their own use, also tools carried by journeying mechanics, as well as fixtures and instruments of traveling artists used by the same in the pursuit of their vocations; further, articles of like description sent in advance of or following the arrival of the persons aforesaid; likewise articles of food for consumption by persons traveling.

Fifth. Vehicles, including rolling-stock of railroads employed in cutting the line for the transportation of persons and goods, and entering for no other purpose; also rolling-stock of domestic railroad companies returning empty, and the rolling-stock already in service of railroad companies of other countries.

By special permission, carriages of travelers, even if the same, when imported, did not serve as the means for carrying their owners, provided proper evidence be produced of the previous use thereof by said owners, as well as of the further use by the same. Horses and other animals if, from the use made of the same on entering it shall be evident that they belong as beasts of draught or burden to traveling or heavy wagons, or serve in transporting goods or carrying passengers.

Sixth. Empty barrels, sacks, and the like, either brought in from other countries with a view of re-exportation for the purpose of purchasing oil, grain, &c., or returned from other countries after oil, &c., has been exported therein, provided that their identity in either case be established, and, if deemed requisite, payment of the import duties secured. But no proof of identity shall be required in the case of any empty sacks, barrels, &c., already used, in relation to which no doubt exists

that they have served as the means of exporting grain, &c., or are intended to be used as such in exporting grain, &c.

Seventh. Sample cards and samples in cut pieces, or otherwise, solely fit for use as such.

Eighth. Objects for art imported for exhibitions or for State and other public art institutions and collections, also other objects imported for the libraries and other scientific collections of public institutions, likewise natural curiosities intended for scientific collections.

Ninth. Antiquarian objects (antiquer antiquities), provided the character of the same shall admit of no doubt that the value thereof consists in age and are not fit for any other use or purpose than for collections.

Tenth. Materials used for building, repairing, or equipping sea-going vessels, inclusive of the ordinary ship fixtures, subject, however, to such regulations appertaining to the same as the Federal Council prescribe.

As regards metal articles used for purposes aforesaid, the provisions now existing in the premises shall remain in force.

SEC. 6. On goods coming from countries that treat German vessels, or goods of German origin, more unfavorably than the vessels or goods of other nations, no treaty stipulations to the contrary, an additional duty, not exceeding 50 per cent. of the amount of duty prescribed in the tariff in pursuance of this act, may be imposed. Such additional duty shall be levied by imperial decree, by and with the consent of the Federal Council.

Upon the issue thereof, said decree shall at once be communicated to the Reichstag, if in session, otherwise it shall be so communicated to the Reichstag at the beginning of the first session of the same subsequent thereto.

Failing to pass the Reichstag, said decree shall cease to have any force and effect.

SEC. 7. First. For the goods designated in No. 9 of the tariff (grain, &c.), if the same be intended for sale exclusively outside of the customs territory, it shall be permitted to establish transit storehouses, not subject to official restrictions; in which storehouses the handling and re-packing of the goods there stored may freely, and without requiring declaration, occur, and where the said goods may be mixed with domestic produce. And it is hereby provided that in exporting the goods so mixed the percentage of the foreign produce contained in the mixture shall be regarded as the quantity entitled to pass free of duty. But such transit storehouses for goods of the description aforesaid may also be permitted to be established regardless of the fact whether the same are intended to be shipped for sale beyond or into the customs territory.

Second. Like provisions respecting transit storehouses as those prescribed in the clause 1 of this section shall apply to the wood enumerated in No. 13 *c* of the tariff. The closing in of the places for storing in the premises may be dispensed with. Likewise may the woods coming under No. B *c* 1 of the tariff be temporarily removed from their place of storage, and, after having been subject to a process resulting in their classification under No. 2 *c*, returned to said place of storage.

In the case of building and cabinet woods imported in rafts and shipped, under permit, to a further point, the Federal Council may provide facilitations in the mode of complying with the customs formalities as prescribed in general.

Third. For mill products (No. 25 *g* of the tariff), when exported, a drawback of the import duty for foreign grain shall be allowed proportionate to the percentage of foreign grain used in the manufacture of

said products, and for the flour exported, when certified, foreign grain corresponding in weight to the amount of grain required for producing said flour shall be admitted free of duty. The proper relative proportions in the premises shall be fixed by the Federal Council.

Fourth. Full regulations in the premises (sections 108 and 109, sections 115 and 118 of the act approved July 1, 1879), including more particularly the requirements to be imposed on the persons keeping store-houses as aforesaid, shall be made by the Federal Council.

SEC. 8. All revenues derived from customs duties and the tax on tobacco which shall exceed the sum of 130,000,000 marks per annum shall be distributed to the several States in like manner in proportion to the population as the same are required to contribute their money quota to the general expenditures of the empire.

Distribution shall be made in accordance with the quarterly and annual statements of accounts required by article 39 of the constitution of the empire, but subject to a final settlement between the treasury of the empire and the several states. This provision shall take effect on the 1st of April, 1880.

If the revenues collected from customs duties and the tax on tobacco within the period of time from October 1, 1879, to March 31, 1880, shall exceed the sum of 52,651,815 marks, the amount exceeding said sum shall be credited to the money quota required of the several states in proportion to their respective population.

## GERMAN CUSTOMS TARIFF.

Commodities.	Rates of duty.	
	In United States money.	In marks.
<i>I.—Waste.</i>		
a. Waste from manufacture of iron (scraps, filings), from sheet-iron, tinned and zinc-coated iron; waste from glass-works, also broken glass and earthenware; from the manufacture of wax; of soap factories, the lye; of tanneries, the leather parings, also old worn-out pieces and other leather waste fit for manufacturing purposes	Free.	
b. Blood of slaughtered animals, liquid or dry; sinews, malt residuums, distillers' wash; chaff, bran; malt sprouts; hard coal-ashes; dung, animal and other manures, such as soaked ashes, lime ashes, sugar-bakers' clay, and bones of animals of whatever kind	Free.	
NOTE TO b.—Otherwise dutiable artificial manufactures and dung salts, are, by special permit and control of their use, admitted duty free.		
c. Rags of all kinds: paper shavings, written and printed waste paper; old fishing nets, old ropes and cords; picked lint	Free.	
NOTE.—Waste, not specially enumerated, is treated as the raw materials from which it is derived.		
<i>II.—Cotton and manufactures of cotton.</i>		
a. Cotton, raw, carded, combed, dyed	Free.	
b. Cotton wadding	\$0 35	1 50
c. Cotton yarn, unmixed or mixed with linen, silk, wool, or other vegetable or animal spinning material:		
1. Single twist, raw, up to No. 17, English	2 85	12 00
Above No. 17 to No. 45, English	4 28	18 00
Above No. 45 to No. 60, English	5 71	24 00
Above No. 60 to No. 79, English	7 14	30 00
Above No. 79	8 56	36 00
2. Double twist, raw, up to No. 17, English	3 57	15 00
Above No. 17 to No. 45, English	4 99	21 00
Above No. 45 to No. 60, English	6 42	27 00
Above No. 60 to No. 79, English	7 85	33 00
Above No. 79	9 28	39 00
3. Single or double twist, bleached or dyed, up to No. 17, English	5 71	24 00
Above No. 17 to No. 45, English	7 14	30 00
Above No. 45 to No. 60, English	8 56	36 00
Above No. 60 to No. 79, English	9 99	42 00
Above No. 79, English	11 42	48 00



## German customs tariff—Continued.

Commodities.	Rates of duty.	
	In United States money.	In marks.
4. Treble or more twist, raw, bleached, dyed ..... 100 kilos..	\$11 42	48.00
5. Twisted sewing thread..... do.....	16 66	76.00
6. Wicks, unplaited..... do.....	5 71	24.00
d. Goods of cotton alone or cotton with metal thread, unmixed with silk, wool, or other animal hair, as mentioned under No. 41:		
1. Raw (of raw yarn), close tissue, excepting cut velvets; net lace, raw and not figured..... 100 kilos..	19 04	80.00
2. Unbleached, close tissue; also finished, excepting cut velvets..... do.....	23 80	100.00
3. All close tissues not included in Nos. 1, 2, and 6; raw (made of raw yarn) light fabrics, excepting window-curtains, not coming under No. 1, hosiery, laces, trimmings, and buttons; also goods spun in part with metal threads..... 100 kilos..	28 56	120.00
4. Curtain stuffs, bleached and finished..... do.....	34 78	230.00
5. All light fabrics, as jacquet, muslin, tulle, marly, gauze, not provided for under Nos. 1, 3, 4..... 100 kilos..	47 60	200.00
6. Laces and all embroideries..... do.....	59 50	250.00
<i>Note to d.</i>		
1. Cotton fishing-nets, new..... 100 kilos..	71	3.00
2. Very coarse tissues of raw spun-cotton waste, also mixed with other materials, or single-dyed threads, in pieces not over 50 centimeters square, having the appearance of gray packing linen and used for press-cloths, scrubbing-cloths, &c..... 100 kilos..	2 38	10.00
3. Raw textures for emery linen and for emery-cloth factories, by special permit, under control; likewise emery cloth.....	Free.	
III.—Lead, also alloyed with antimony, zinc, tin, and manufactures thereof.		
a. Crude lead, old lead, lead silver, and gold litharge.....	Free.	
b. Rolled lead, printing-types..... 100 kilos..	71	3.00
c. Rough lead articles, also combined with wood, iron, zinc, or tin, not polished or varnished; wire..... 100 kilos..	1 42	6.00
d. Fancy manufactures of lead, also mixed with other materials, if not belonging to Class 20..... 100 kilos..	5 71	24.00
IV.—Brush and sieve manufactures.		
a. Coarse:		
1. Brushes and brooms of bast straw, rushes, grasses, roots, esparto, also when combined with wood or iron not polished or varnished..... 100 kilos..	52	4.00
2. Other brushes, also when combined with wood or iron not polished or varnished..... 100 kilos..	1 90	8.00
b. Fancy, in connection with other materials, if not belonging to Class 20..... 100 kilos..	5 71	24.00
V.—Drugs, chemicals, and dye-stuffs.		
a. Ethers of all kinds, chloroform, collodion, etheric oils (except those hereafter enumerated under b and i); essences, extracts, tinctures, and waters containing alcohol or ether for the trade or medicinal use; all varnishes (except oil varnish), painters' gousche, and pastel colors; Chinese ink, paint boxes, pencils and crayons, drawing chalk..... 100 kilos..	4 76	20.00
b. Oil of juniper and of rosemary..... do.....	2 85	12.00
c. Oxalic acid and oxalic-acid potash; yellow, white, and red prussiate of potash..... 100 kilos..	1 90	8.00
d. Caustic potash, caustic natron, oil varnish..... do.....	52	4.00
e. Alum, printers' ink, chloride of lime, dye-wood extract, gelatine, putty, glue, soot, shoe-blackening, sealing-wax, inks and ink-powders, wagon-grease, combustibles..... 100 kilos..	71	3.00
f. Soda, calcined; bicarbonate of soda..... do.....	59	2.50
g. Soda, raw, natural, or artificial; crystallized soda, potash..... do.....	33	1.50
h. Water (soluble) glass..... do.....	23	1.00
i. Raw chemical preparations for industrial or medical uses, drugs, apothecary wares, and dye-stuffs, not heretofore included under a to h or in other sections of the tariff: benzole and other light tar oils, oil of turpentine, oil of resin, animal oil, natural and artificial mineral waters, inclusive of bottles and jugs; sealing wafers, concentrated juices, gun-powder, wine, yeast, dry or paste.....	Free.	
VI.—Iron and steel, manufactures of iron and steel.		
a. Pig-iron of all kinds, old iron, and such scrap-iron as does not come under No. 1..... 100 kilos..	23	1.00
b. Wrought iron (welded iron, welded steel, fused iron, fused steel), in bars, including shaped iron, tires, plowshares, angle and T iron rails, fish-plates iron, bed-plates, and sleepers..... 100 kilos..	59	2.50

*German customs tariff—Continued.*

Commodities.	Rates of duty.	
	In United States money.	In marks.
<i>Note to b.</i>		
1. Loop-iron containing dross, raw rails, ingots.....100 kilos.	\$0 35	1. 50
2. Wrought iron, in bars, for wire-brush factories, by special permit, under control.....100 kilos.	11	. 50
c. Plates and sheets of wrought iron:		
1. Rough.....do.	71	3. 00
2. Polished, varnished, lacquered, coppered, tinned, zincked, or leaded, 100 kilos.	1 19	5. 00
d. Wire, also coppered, tinned, zincked, leaded, polished, or varnished, 100 kilos.	71	3. 00
e. Manufactures of iron and steel:		
1. Heavy articles of cast iron.....100 kilos.	58	2 50
Of iron roughly wrought for machines and wagons, bridges and parts of bridges, anchors, chains and cables, railroad axles, tires, wheels, buffers, cannons, anvils, vices, pulleys, blacksmiths' hammers, wagon-springs, bed-springs, crowbars, brakes, horseshoes.....100 kilos.	71	3. 00
Rolled and drawn tubes of wrought iron.....do.	1 19	5. 00
2. Less heavy articles:		
Otherwise not provided for, also combined with wood....do.	1 42	6. 00
Smoothed, varnished, coppered, zincked, tinned, leaded, or enameled, but not polished or lacquered; also, skates, hammers, hatchets, axes, common locks, coarse knives, scythes, sickles, curry-combs, tower-clocks, turners' screws, squares, wood, lock, wheel, and coil screws; tongs, pressed keys, dung and hay forks.....100 kilos.	2 38	10. 00
Hand-files, sword-blades, planes, chisels, clothiers' and tailors' scissors, turners' scissors, hedge scissors, saws, augers, die-stocks, machine and paper knives, &c.....100 kilos.	3 57	15. 00
NOTE to e 2.—Chains and wire cables for chain and other towing purposes.	Free.	
3. Fancy articles:		
Of fine cast iron, as light ornamental castings, polished castings, art castings, malleable castings of wrought iron, polished or lacquered; cutlery, shears, knitting and crochet needles, sword cutlery; all these articles otherwise not mentioned, also in connection with wood and other materials, provided they are not included in No. 20.....100 kilos.	5 71	24. 00
Sewing needles, pens of steel and other not precious metals, parts of watches and watch movements of not precious metals; fire-arms, of all kinds.....100 kilos.	14 23	60. 00
VII.— <i>Clay, ores, and precious metals.</i>		
Clays and raw material substances, also burnt, washed or ground, ores prepared or unprepared, not specially taxed, precious metals, as coins, in bars or pieces		
VIII.— <i>Flax, &amp;c.</i>		
Flax and other vegetable materials for spinning (except cotton), raw, dried, broken, or hackled, or as waste.....100 kilos.	23	1. 00
IX.— <i>Grain and agricultural produce.</i>		
a. Wheat, rye, oats, and pulse, and grains not otherwise provided for, 100 kilos.	23	1. 00
b. Barley, maize, and buckwheat.....100 kilos.	11	. 50
c. Malt.....do.	28	1. 25
d. Anise, coriander, fennel, cumin.....do.	71	3. 00
e. Rape seeds, turnip seeds.....do.	07	. 30
f. Other produce not otherwise provided for.....	Free.	
X.— <i>Glass and glass ware.</i>		
a. Green and other natural colored common hollow glass, neither pressed, cut, nor polished, also covered with wicker of willow, broom, straw, or rushes; glass metal; raw optical glass (flint crown glass); raw ribbed glass plates; roof glass, enameling and glazing material; glass tubes and rods, without distinction of color, used for glass beads and fancy blowing glass.....100 kilos.	71	3. 00
b. White hollow glass, not figured, uncut, not ground, not pressed, or only with finished stoppers, bottoms, or brims.....100 kilos gross.	1 90	8. 00

*German customs tariff—Continued.*

Commodities.	Rates of duty.	
	In United States money.	In marks.
<i>c.</i> Window and sheet glass in its natural color (green, partly or entirely white), uncut, not figured, if the single length and single breadth taken together, measure:		
1. Up to 120 centimeters.....100 kilos gross.	\$1 42	6.00
2. Above 120 to 200 centimeters.....do.	1 90	8.00
3. Above 200 centimeters.....do.	2 38	10.00
<i>d.</i> 1. Mirror-glass, raw, not cut.....100 kilos.	71	3.00
2. Plate (window) and mirror glass, cut, polished, figured, ground, also colored and overlaid.....100 kilos gross.	5 71	24.00
<i>e.</i> Ornaments for glass chandeliers; glass buttons, also colored; solid white glass, not specially mentioned; pressed, polished, ground, cut, etched, figured, not included in <i>d</i> or <i>f</i> .....100 kilos.	5 71	24.00
<i>NOTE TO e.</i> —Small glass plates, glass beads, enamel drops, also colored, 100 kilos.....	95	4.00
<i>f.</i> Colored, with exception of what is included in <i>a</i> , <i>d</i> , and <i>e</i> painted or gilded (silvered) glass; glass pastes (imitations, rare, of precious stones) not set; glass ware and enamel goods combined with other materials not belonging to No. 20.....100 kilos.	7 14	30.00
<i>NOTE TO f.</i> —Milk glass, and alabaster glass, not figured, not cut, not ground, not painted, not pressed, or only with finished stoppers, bottoms, or brims.....100 kilos.	2 38	10.00
<b>XI.—Hair of horses, human hair, and manufactures thereof, feathers and bristles.</b>		
<i>a.</i> Horse hair, raw, heckled, boiled, dyed, and in plaits, spun bristles, oil-cloth, raw bed feathers.....	Free.	
<i>b.</i> Braids of horse hair; textiles of mixed materials of which either the entire warp or woof consists of horse hair.....100 kilos.	11 42	48.00
<i>c.</i> Human hair, raw, or in any of the states specified in <i>e</i> .....do.	23 80	100.00
<i>d.</i> Wigs and other articles made of hair or imitation hair.....do.	47 60	300.00
<i>e.</i> Writing-quills, raw, ornamental feathers, not specified under <i>f</i> .....do.	71	3.00
<i>f.</i> Writing-quills, prepared; bed feathers cleaned and prepared.....do.	1 42	6.00
<i>g.</i> Prepared ornamental feathers.....do.	71 40	300.00
<b>XII.—Hides and skins.</b>		
<i>a.</i> Hides and skins, raw (green, salted, limed, dry), for conversion into leather; raw sheep, lamb, and goat-skins with the hair on, and sheep-skins with the hair off but not dressed.....	Free.	
<i>b.</i> Fur skins.....	Free.	
<b>XIII.—Wood and other vegetable and animal materials for carving, and manufactures thereof.</b>		
<i>a.</i> Fire-wood, brush-wood, also brush-wood brooms; charcoal, cork-wood, also cut in plates; tan-cake (tan-bark as burning material); vegetable and animal substances for carving not specially named.....	Free.	
<i>b.</i> Wood, bark and tan.....100 kilos.	11	50
<i>c.</i> Timber for building and cabinet woods:		
1. Raw or rough-hewn.....100 kilos.	02	10
2. Sawed or otherwise cut timber, barrel-staves, and similar sawn or cut articles; also unpeeled basket-willow and hoops.....100 kilos.	05	25
<i>d.</i> Coarse, rough, undyed, coopers', turners', joiners', and only planed wood-ware and wagoners' work, with the exception of hard-wood furniture and veneered furniture; peeled barked willow; coarse basket-makers' work neither painted, dyed, lacquered, polished, or varnished; sheets of horn and roughly cut bone plates; chair cane, tinged or split.....100 kilos.	71	23.00
<i>e.</i> Wood cut in veneers, not glued, not tinged for parquets.....100 kilos.	1 42	6.00
<i>f.</i> Wooden furniture and parts of furniture not specified under <i>d</i> and <i>g</i> , also partly combined with metals not precious; tanned leather; glass; stones (excepting precious and semi-precious stones); stoneware, <i>faience</i> , or porcelain; other joiners', turners', and coopers' ware, wagoners' work and coarse basket wares, which are painted, tinged, lacquered, polished, varnished, or partly combined with the above-named materials; glued and veneered parquet-work not inlaid; coarse cork articles (strips, bungs); coarse toys (not painted); whalebones in staves.....100 kilos.	2 38	10.00
<i>g.</i> Fancy wooden articles (with inlaid or carved work), fancy basket-ware, bottle corks, cork soles, carved cork articles, in general all not under <i>d</i> , <i>e</i> , <i>f</i> , and <i>h</i> ; specified articles of vegetable or animal carving material, with the exception of tortoise-shell, ivory, mother-of-pearl, amber, agate, jet, also combined with other materials, provided they do not thereby come under No. 20, bronze wood.....100 kilos.	7 14	30.00
<i>A.</i> Upholstered furniture of all kinds:		
1. Uncovered.....do.	7 14	30.00
2. Covered.....do.	9 53	40.00

*German customs tariff—Continued.*

Commodities.	Rates of duty.	
	In United States money.	In marks.
<b>XIV. Hops.</b>		
Hops ..... 100 kilos gross..	\$4 76	20.00
<b>XV.—Instruments, machines, vehicles.</b>		
a. Instruments with regard to the material of which they are made:		
1. Musical ..... 100 kilos..	7 14	30.00
2. Astronomical, surgical, optical, mathematical, chemical (for laboratories), philosophical .....	Free.	
b. Machines:		
1. Locomotives, portable engines ..... 100 kilos..	1 90	8.00
2. Other, chief material being—		
Wood ..... 100 kilos..	71	3.00
Cast iron ..... do.....	71	3.00
Wrought iron ..... do.....	1 19	5.00
Other, not precious metals ..... do.....		
NOTE TO b, 1, 2.—Steam engines and boilers for building ships .....	Free.	
3. Cards and card clothing ..... 100 kilos..	8 56	26.00
c. Carriages and sleighs:		
1. Railway rolling-stock without leather or upholstery work, ad valorem .....	67 per cent.	
All other ..... ad valorem .....	10 per cent.	
2. Other carriages and sleighs with leather or upholstery work, per piece .....	35 70	150.00
d. Sea and river ships, including the usual equipments and appurtenances of same, such as anchors, anchor and other ship chains, as also steam engines and boilers .....	Free.	
NOTE.—All movable articles of the ship's inventory other than such as are ordinarily used on ships are subject to the duty prescribed for such articles.		
<b>XVI.—Almanacs.</b>		
Almanacs .....	Free.	
<b>XVII.—Caoutchouc and gutta-percha, and manufactures thereof.</b>		
a. Caoutchouc and gutta-percha, raw or purified; hard rubber, also in polished plates, staves, tubs, &c., and unpressed with designs .....	Free.	
b. Caoutchouc thread not combined with other materials, or surrounded or overspun with cotton, linen, or woolen raw (not bleached or dyed) yarn only in such manner that the caoutchouc thread remains visible without stretching the same; caoutchouc plates; caoutchouc solution, 100 kilos .....	71	3.00
c. Coarse articles of soft caoutchouc not lacquered, not dyed, not printed; hard rubber goods; all these articles also if mixed with other materials not included in No. 20; overspun caoutchouc thread ..... 100 kilos..	9 52	40.00
d. Fancy articles of soft caoutchouc, lacquered, painted, printed, or with impressed designs; all these articles also mixed with other materials not included in No. 20 ..... 100 kilos..	14 28	60.00
e. Tissues of all kinds covered or saturated or joined together with layers of caoutchouc or with India rubber threads pasted in; also same combined with other spinning material; hosiery and ribbon goods mixed with caoutchouc threads. .... 100 kilos..	21 42	90.00
NOTE TO e, 1. Printed cloth of caoutchouc, for factories, and artificial carding leather, for card factories, both by special permit under control .....	Free.	
2. Hose of hemp, machine belting, and wagon-covers of coarse textiles mixed with caoutchouc ..... 100 kilos..	5 71	24.00
<b>XVIII.—Ready-made wearing apparel and under-clothes, millinery.</b>		
a. Of silk or floss-silk; also, mixed with wire, embroidered, and lace cloths, 100 kilos .....	214 20	900.00
b. Of half silk ..... 100 kilos..	107 10	450.00
c. Others, not enumerated hereafter under d and e. .... do.....	71 40	300.00
d. Of textures covered or saturated with caoutchouc; also, of spun caoutchouc mixed with other spinning materials ..... 100 kilos..	30 94	130.00
e. Shirts and under-clothes of linen and cotton ..... do.....	35 70	150.00
f. Hats:		
1. Gents' silk hats, trimmed or not ..... 100 kilos..	71 40	300.00
2. Gents' felt hats, trimmed or not ..... do.....	42 84	180.00
3. Ladies' hats, trimmed ..... per piece .....	23	1.00
4. Hats not specially named, trimmed or not ..... do.....	04	0.20
g. Artificial flowers:		
1. Flowers, finished, composed entirely of woven or knitted tissues, or mixed with other materials ..... 100 kilos..	71 40	300.00
2. Parts of flowers, as leaves, stems, &c., not joined together ..... do.....	28 56	120.00

## German customs tariff—Continued.

Commodities.	Rates of duty.	
	In United States money.	In marks.
<b>XIX.—Copper and other not specially-named base metals, compositions of base metals not specially named, and manufactures thereof.</b>		
a. Copper, crude or scrap		
b. Wrought or rolled copper, in bars and sheets, wire and telegraph cable, 100 kilos	\$2 85	\$12. 00
c. In sheets or wire, plated	6 66	28. 00
d. Manufactures, viz:		
1. Coarse copper, smiths' and brass-founders' work; also, combined with wood or iron not polished or lacquered; also, tubs of sheet-brass and wire-cloth	4 28	18. 00
2. Others, provided they do not come under No. XIX, d 3, or, by reason of their composition with other materials, under No. XX	7 14	30. 00
3. Of aluminum, nickel; fancy articles of alfenide, Britannia metal, bronze, German silver, tombac, and like alloys; fancy verdigrised brass articles; also, combined with other materials, unless otherwise provided under No. XX	14 28	60. 00
<b>XX.—Fancy goods, hardware, ornaments, &amp;c.</b>		
a. Articles wholly or partly composed of precious metals, genuine pearls, corals, or precious stones, watches, gold and silver leaf	142 80	600. 00
b 1. Articles wholly or partly of amber, celluloid, ivory, agate, jet, lava, meerschaum, mother of pearl, and tortoise-shell, of not precious metals gilded or silvered or covered with gold or silver, teeth with roots or tubes of platinum or other precious metals		
2. Fancy articles (gents' and ladies' ornaments, articles of toilet, &c.) wholly or partly of aluminum, like goods of other base metals, but of fine workmanship and either more or less nickled, gilded or silvered or verdigrised, or in connection with semi-precious stones or artificial stones, alabaster, or enamel, or with carved work, paste, cameo, ornaments in cast metal, &c.		
3. Mantel and wall clocks, fans of all kinds, fancy articles of wax, 100 kilos	47 60	200. 00
NOTE to b 1.—Ivory pieces prepared for conversion into articles named under No. XX, b 1	7 14	30. 00
c 1. Not genuine gold leaf and silver leaf		
2. Eye-glasses, opera-glasses, wax beads, umbrellas, and parasols		
3. Articles of cotton, linen, silk, wool, and other animal hair, in connection with animal or vegetable carved work, base metals, glass, gutta-percha, caoutchouc, leather, leather cloth, paper pasteboard, stone, straw, or clay ware, and not otherwise provided for	28 56	120. 00
<b>XXI.—Leather and leather goods.</b>		
a. Leather of all kinds (excepting next item), not colored; colored Russian leather; parchment boot-tops	4 28	18. 00
b. Sole-leather and Brussels and Danish glove-leather; cordovan; morocco, saffian; colored leather (excepting that named under a); lacquered leather	8 56	36. 00
NOTE to b.—Half tanned, tanned, not yet colored or otherwise finished sheep or goat skins	71	3. 00
2. Coarse saddlers', shoemakers', strap-makers', and other coarse leather wares, also other articles of uncolored or merely blacked tanned leather, or of raw hides; all these articles also in connection with other materials provided they do not come under No. XX	11 90	50. 00
d. Fancy leather articles of cordovan, saffian, morocco, Brussels or Danish leather, of chamouis and tawed leather, of colored leather; lacquered leather and parchment, also combined with other materials not included under No. XX; fine shoes of all kinds	16 61	70. 00
NOTE to c AND d.—Coarse shoemakers' and trunk-makers' articles of gray packing linen, sail-cloth, raw linen, raw ticking or drilling, or coarse not printed wax-cloth, pay the same duty as coarse leather goods; articles of fine wax-cloth, wax-muslin, wax-stuff, &c., the same as fancy leather goods; a, leather gloves	23 80	100. 00
<b>XXII.—Linen yarn, linen, and other linen goods, namely: yarn and woven or worked goods of flax or other vegetable spinning material, except cotton.</b>		
a. Yarn, excepting that mentioned hereafter under b:		
1. Up to No. 5, English	71	3. 00
2. Above No. 5 to No. 8, English	1 19	5. 00
3. Above No. 8 to No. 20, English	1 42	6. 00
4. Above No. 20 to No. 35, English	2 14	8. 00
5. Above No. 35, English	2 85	12. 00
NOTE to a.—Jute, manila, hemp, and cocoa-nut fiber, raw, dried, broken, or hackled	Free	

## German customs tariff—Continued.

Commodities.	Rate of duty.	
	In United States money.	In marks.
<b>b. Dyed, printed bleached yarn:</b>		
1. Up to No. 20, English .....	100 kilos..	\$2 85 12.00
2. Above No. 20 to No. 35, English .....	do.....	3 57 15.00
3. Above No. 35, English .....	do.....	4 76 20.00
<b>c. Threads of all kinds .....</b>	<b>do.....</b>	<b>8 56 36.00</b>
<b>d. Rope-makers' work, unbleached; bleached ropes, cables, cords, strings, girts, braces, and hose; coarse and dyed foot-rugs of manilla hemp, cocoa, jute, and like fiber .....</b>	<b>100 kilos..</b>	<b>1 42 6.00</b>
<b>e. Linen, ticking, drilling, not dyed, not printed, not bleached:</b>		
1. Up to 16 threads in the warp and woof together on a surface of four square centimeters .....	100 kilos..	1 42 6.00
2. With 17 to 40 threads, as above; fancy, and all dyed foot-rugs of manilla, hemp, cocoa-nut, jute, and like fibers .....	100 kilos..	2 85 12.00
3. With 41 to 80 threads, as above; rope-makers' work, dyed and bleached, excepting that named under d .....	100 kilos..	5 71 24.00
4. With 81 to 120 threads, as above .....	do.....	8 56 36.00
5. With more than 120 threads, as above .....	do.....	14 28 60.00
<b>f. Linen, ticking, drilling dyed, printed, bleached; also woven of dyed, printed, bleached yarn:</b>		
1. Up to 120 threads in warp and woof together on a surface of four square centimeters .....	100 kilos..	14 28 60.00
2. With more than 120 threads, as above .....	do.....	28 56 120.00
<b>g. Damask of all kinds; made up table, bed, and towel linen; linen blouses of all kinds .....</b>	<b>100 kilos..</b>	<b>14 28 60.00</b>
<b>A. Ribbons, braids, fringes, gauze, woven borders, loops, embroideries, hosiery; tissues and other goods mixed with metallic threads, 100 kilos..</b>	<b>23 80</b>	<b>100.00</b>
<b>XXIII. Thread-lace .....</b>	<b>142 80</b>	<b>600.00</b>
<b>XXIV. Candles .....</b>	<b>do.....</b>	<b>3 57 15.00</b>
<b>XXIV bis.—Literary works and works of art. Statuary.</b>		
<b>a. Paper written upon (documents and manuscripts), books in all languages, copper engravings, other engravings, also wood engravings; lithographs and photographs; geographical maps and sea-charts; printed music .....</b>		<b>Free.</b>
<b>b. Engraved metal plates, engraved wood blocks, also lithographic stones with drawings, cuts, or letters, all used for printing .....</b>		<b>Free.</b>
<b>c. Paintings and drawings; statues of marble and other kinds of stone; statues of metal, not under life-size; medals .....</b>		<b>Free.</b>
<b>XXV. Colonial goods, groceries, spices, confectionery, and other articles for food and drink; also tobacco and manufactures thereof.</b>		
<b>a. Beer of all kinds, also mead .....</b>	<b>100 kilos..</b>	<b>96 4.00</b>
<b>b. Spirituous liquors of all kinds, such as arrac, rum, French brandy, and spiced brandies, in casks and bottles .....</b>	<b>100 kilos..</b>	<b>11 42 48.00</b>
<b>c. Yeast of all kinds, exclusive of wine-yeas .....</b>	<b>do.....</b>	<b>9 99 42.00</b>
<b>NOTE.—Liquid yeast, on the Bavarian-Austrian border, from Oberneuhaus up to and inclusive of Melleck; on the Saxon-Bohemian border left of the Elbe; on the Baden-Swiss border, at Oelmingen and the so-called Hövi, for the private use of the inhabitants there, in small quantities, up to 13 kilograms, inclusive, carried on a single trip .....</b>		
<b>d 1. Vinegar of all kinds, in casks .....</b>	<b>do.....</b>	<b>5 71 24.00</b>
<b>2. In bottles and jugs .....</b>	<b>do.....</b>	<b>4 76 20.00</b>
<b>e. Wine and must, cider, and artificial drinks, not specified under other numbers of the tariff:</b>		
1. Imported in casks .....	100 kilos..	5 71 24.00
2. Imported in bottles .....	do.....	11 42 48.00
<b>f. Butter and artificial butter.</b>		
<b>NOTE.—Butter in single pieces of not more than 2 kilograms, not sent by post, for the inhabitants on the border, with the provision that such license shall be discontinued or limited in localities where same is abused .....</b>		
<b>g 1. Meat, fresh and prepared; poultry and game of all kinds, not live; meat extract; concentrated bouillon .....</b>	<b>100 kilos..</b>	<b>2 85 12.00</b>
<b>2. Fish, not otherwise provided for .....</b>	<b>do.....</b>	<b>71 3.00</b>
<b>NOTE to g 1.—Single pieces of fresh and prepared butchered meat, in quantities not exceeding 2 kilograms, not sent by post, for inhabitants of the border, with the provision that such license shall be discontinued or limited in localities where same is abused .....</b>		
<b>A. Fruits (tropical fruits):</b>		
1. Fresh oranges, lemons, limes, pomegranates, &c. ....	100 kilos..	2 85 12.00
<b>NOTE.—If, at the request of the party paying the duty, the same shall be levied per piece in this case, 48 cents shall be collected for every 100 pieces, no duty being paid on any decayed fruit when the latter is thrown away in the presence of the officials.</b>		
2. Figs, dried currants, raisins .....	100 kilos..	5 71 24.00
3. Dried dates, almonds, oranges, &c. ....	do.....	7 14 30.00

## German customs tariff—Continued.

Commodities.	Rate of duty.	
	In United States money.	In marks.
i. Spices of all kinds, not otherwise provided for ..... 100 kilos..	\$11 90	50. 00
NOTE TO i.—Spices for manufacture of essential oils by special permit, under control	Free.	
k. Herrings, salted ..... per barrel (ten) ..	71	3. 00
NOTE.—On salted herrings, not packed in the manner customary in trade, 2 marks (46 cents) per 100 kilos. shall be paid.		
1. Salted herrings for manuring purposes .....	Free.	
l. Honey ..... 100 kilos ..	71	3. 00
m. Coffee, raw, and coffee substitutes (excepting chicory) .....	9 53	40. 00
2. Burnt coffee .....	11 90	50. 00
3. Cocoa in beans .....	8 83	35. 00
4. Cocoa shells .....	2 85	12. 00
n. Caviar and substitutes for caviar .....	23 80	100. 00
o. Cheese of all kinds .....	4 76	20. 00
p 1. Confectionery, candies, and cakes, of every description, cocoa powder, chocolate and substitutes for chocolate; fruits preserved in sugar, vinegar, oil, or otherwise, in jars, cans, &c., also preserved spices, vegetables, and other articles of food (mushrooms, truffles, fowls, crabs, &c.); prepared fish, prepared mustard; olives, capers, meat pie, sauces, and similar table delicacies ..... 100 kilos ..	14 28	60. 00
2. Fresh fruit, seeds, berries, leaves, blossoms, mushrooms, vegetables, dried, baked, powdered, steamed, or salted, all these articles not otherwise provided for; juices of fruit, berries and turnips, not preserved in sugar; fresh and dried peelings of tropical fruits; green oranges and oranges preserved in salt water; dried nuts, chestnuts, St. John's bread, pine cones, burnt or ground chicory .....	52	4. 00
q 1. Farina powders, starch, starch-gum, arrowroot, vermicelli, sago and substitutes for sago, tapioca .....	1 42	6. 00
2. Mill products of grain and pulse, viz: crushed or shelled grain, peeled pearl barley, groats, &c., meal, flour, ordinary bakers' wares .....	47	2. 00
NOTE TO q 2.—Quantities of not more than 3 kilograms, for inhabitants of the border (with the provision that such license may be discontinued or limited in localities where same is abused)	Free.	
r. Muscle sea-shell animals, such as oysters, lobsters, shells, muscles, tortoises, turtles, &c. .... 100 kilos ..	5 71	24. 00
s. Rice in and out of the pod .....	28	4. 00
NOTE.—Rice for manufacture of starch, under control .....	28	1. 20
t. Salt (kitchen table, rock, and sea salt), also all materials from which salt is extracted .....	3 04	12. 80
NOTE.—Salt imported from the sea-board .....	2 85	12. 00
u. Sirup. (See note to sugar, below.) .....		
v. Tobacco:		
1. In leaf, unmanufactured, also stems and tobacco-juice ..... 100 kilos ..	20 23	85. 00
2. Manufactured:		
A. Cigars and cigarettes .....	64 26	270. 00
B. Other manufactures of tobacco .....	42 84	180. 00
w. Tea .....	23 80	100. 00
x. Sugar:		
NOTE.—The rates of duty for sugar and sirup are those fixed by the act of June 26, 1889, relative to the duty on sugar, and are as follows, viz:		
1. On refined sugar of all kind sand on raw sugar where the latter corresponds to the samples prepared in accordance with the Dutch standard No. 19 and above, which samples are to be deposited in the custom-houses as prescribed and published by order of the federal council .....	7 14	30. 00
2. Raw sugar, not provided for under 1. ....	171	24. 00
3. Sirup .....	157	15. 00
NOTE.—Solutions of sugar, positively distinguishable as such, are subject to the same duties as are named under 2.		
4. Molasses, entered for manufacture of spirituous liquors, under control .....	Free.	
XXVI.—Oil not otherwise provided for, lard, grease.		
a. Oil:		
1. Oil of all kinds in bottles or jars ..... 100 kilos ..	4 76	20. 00
2. Table oils such as olive, poppy, sesame; ground-nut, beech-nut, sunflower oil in casks .....	1 90	8. 00
3. Olive oil in casks when reduced to a state of adulteration on the part of the customs authorities .....	Free.	
4. Other oil in casks .....	95	4. 00
5. Palm and cocoa-nut oil in dry state .....	47	2. 00
b. Residua, dry, from manufacture of fatty oils; also ground .....	Free.	
c. Lard, &c.:		
1. Lard of hogs and goose-grease ..... 100 kilos ..	2 38	10. 00
2. Stearine, palmitin, paraffine, spermaceti, wax .....	1 20	8. 00
3. Fish fat and train oil .....	71	3. 00
4. Other animal fat .....	47	2. 00

*German customs tariff—Continued.*

Commodities.	Rate of duty.	
	In United States money.	In marks.
<b>XXVII.—Paper and manufactures of paper.</b>		
a. Unbleached or bleached half-manufactured goods from rags .....	Free.	
b. Unbleached or bleached half-manufactured materials for paper-making of wood, straw, esparto or other fibers; gray, blotting, and yellow coarse straw paper, pasteboard, exclusive of polished and leather cardboard; slate-paper and tablets of same without admixture of other material; sharpening and polishing paper, fly-paper, &c. .... 100 kilos.	\$0 23	1. 00
c. Packing-paper, not mentioned under b or d, unpolished .. do ..	95	4. 00
d. Packing-paper, polished; glass and leather cardboard, pressing-board, do ..	1 42	6. 00
e. Printing, writing, blotting, and tissue paper of all kinds; also lithographed, printed lined paper prepared for bills, labels, bills of lading, &c., gilt and silvered paper, perforated paper; also strips of such paper; printer's cardboard .. 100 kilos.	2 88	10. 00
f. 1. Molded work of statuary pasteboard, asphalté, or similar material; also in connection with wood or iron, but neither painted nor varnished .. 100 kilos.	95	4. 00
2. Manufactures of paper, pasteboard, or papier-maché; molded work of statuary pasteboard, &c., asphalté, or like materials not included under f 1 or f 3 .. 100 kilos.	2 85	12. 00
3. Manufactures of the materials aforesaid combined with other materials not provided for under No. XX, paper-hangings .. 100 kilos.	5 71	24. 00
<b>XXVIII.—Furs (<i>furrier's goods</i>.)</b>		
a. Fur coats, caps, gloves, lined fur covers, lined furs for trimmings .. 100 kilos.	35 70	150. 00
b. Ready-made sheep-skin coats, not covered with other materials, washed and dyed, not lined angora or sheep skins, unlined covers and furs for trimming .. 100 kilos.	1 42	6. 00
<b>XXIX.—Petroleum.</b>		
Petroleum and other mineral oils not otherwise provided for, crude and refined .. 100 kilos.	1 42	6. 00
NOTES.—1. The federal council is authorized to permit the importation of mineral oil to be used for industrial purposes other than the manufacture of illuminating-oil free of duty, subject, however, to a control of the use of the same.		
2. The federal council is authorized to permit the duty on petroleum to be levied according to the number of barrels, the rate of duty being fixed in accordance with the maximum weight of the barrels ordinarily used in the trade.		
<b>XXX.—Silk and manufactures of silk.</b>		
a. Silk cocoons; silk, reeled or spun; floss silk, combed, spun, or in thread; all these not dyed; also dyed silk waste .. 100 kilos.	Free.	
b. Silk-wadding .. do ..	5 71	24. 00
c. Floss silk, dyed, loops .. do ..	8 56	36. 00
d. Thread of raw silk, sewing-silk, button-hole silk, &c., dyed and undyed, do ..	23 80	100. 00
e. Manufactures of silk or floss silk, also if containing metallic thread; manufactures of silk mixed with other spinning materials and at the same time with metallic thread, lace blonde and embroidery wholly or partly of silk .. 100 kilos.	142 80	600. 00
NOTE TO e.—Tulle, raw or dyed, not patterned.		
f. All articles of silk or floss silk mixed with cotton, linen, woolen, or other animal or vegetable spinning materials .. 100 kilos.	71 40	300. 00
1. Very coarse, composed of raw tissues made from silk waste, having the appearance of gray packing linen, and used for press-cloths, wiping cloths, when combined with other spinning materials or single colored threads .. 100 kilos.	2 38	10. 00
2. Silk spun together with yarn of other material but not forming the covering of the threads, nor running continuously throughout the whole length of the same, not to be considered in the liquidation of duties on said yarns.		
<b>XXXI.—Soap and perfumeries.</b>		
a. Green, black, and other barrel soap .. 100 kilos.	1 19	5. 00
b. Hard soap not mentioned under c .. do ..	2 38	10. 00
c. Soap in cakes, balls, in boxes, jars, &c.; perfumed soaps of all kinds, 100 kilos ..	7 14	30. 00
d. Scented fat, scented and fatty oils, scented (not alcoholic) water imported in direct receptacles and of a weight of at least 10 kilograms .. 100 kilos.	4 76	20. 00
e. All other perfumeries .. do ..	23 80	100. 00
<b>XXXII.—Playing-cards.</b>		
In addition to internal stamp tax .. 100 kilos.	14 28	60. 00



## German customs tariff—Continued.

Commodities.	Rate of duty.	
	In United States money.	In marks.
<b>XXXIII.—Stone, stoneware, precious stones.</b>		
a. Stones, rough and hewn, flint stones, mill-stones, also with iron hoops; grinding and whet stones of all kinds, rough stone masonry, <i>e. g.</i> , door-posts and window-ledge, pillars and parts of pillars, gutters, pipes, &c., unpolished, exclusive of marble and alabaster work (taws, playing-marbles) .....	Free.	
b. Roofing slate, rough slate slabs and rough table slate .....	71	0.50
c. Precious stones, also imitations, and corals, cut, pearls, all not set; cut semi-precious stones, and manufactures thereof not provided for under No. XX .....	14 28	60.00
d. Other articles of stone excepting statuary:		
1. Not in connection with other materials, or only with wood or iron, not polished or lacquered, split, sawed, or otherwise cut, slate plates, slates in wooden frames, also lacquered or polished, 100 kilos .....	71	3.00
2. In connection with other materials, provided same are not articles coming under No. XX .....	5 71	24.00
<b>XXXIV.—Coals, &amp;c.</b>		
Coal, brown coal, cokes, peat-turf charcoal .....	Free.	
<b>XXXV.—Straw and bast goods.</b>		
a. Matting and foot-rugs of bast straw, reeds, grass, roots, rushes, &c.; also, other kinds of reed-ware, coarse, colored, and uncolored, 100 kilos ..	71	8.00
b. Straw plaitings .....	4 28	18.00
c. All straw and bast goods not included under a and b, especially straw and bast plaitings, covers, curtains, and like goods of unsplit straw, the straw and bast goods when combined with other materials, provided same so combined do not come under No. XX .....	5 71	24.00
d. Hats of straw, cane, bast, brushes, fish-bone, palm-leaves and chip:		
1. Untrimmed .....	04	0.20
2. Trimmed .....	09	0.40
NOTE TO d.—Hats of hair or hemp-braid of sparterre or braids of so-called cotton sparterre and straw are treated as straw hats.		
e. Sparterre goods of all kinds .....	21 40	90.00
<b>XXXVI.—Tar, pitch, resins of all kinds, asphaltic mineral tar.</b>		
<b>XXXVII.—Animals and animal products not otherwise enumerated.</b>		
a. Live animals and animal products, not elsewhere enumerated; fresh fish; also, bee-hives with live bees .....	Free.	
b. Eggs of fowls .....	71	3.00
<b>XXXVIII.—Earthenware.</b>		
a. Common bricks, fire-bricks, tiles, tubes, and pottery, not glazed .....	Free.	
b. Glazed tiles and bricks, flat tiles, architectural ornaments, also of terra-cotta, smelting-pots, glazed tubes, muffles, capsules and retorts, plates, jars, and other articles of coarse earthenware, coarse stove-tile, clay pipes, glazed pottery .....	23	1.00
c. Other earthenware, exclusive of porcelain and wares of like character as porcelain:		
1. Plain-colored or white; fancy terra-cotta ware .....	2 38	10.00
2. Two and more colored, bordered, printed, painted, gilded, silvered; also earthenware in connection with other materials, provided the same do not come under No. XX .....	3 80	16.00
d. Porcelain and wares of like character, as porcelain (Parian Jasper, &c.):		
1. White .....	3 33	14.00
2. Colored, bordered, painted, gilded, silvered, also in connection with other materials, provided the same do not thereby come under No. XX .....	7 14	30.00
<b>XXXIX.—Horses, cattle, &amp;c.</b>		
a. Horses, asses, mules, donkeys .....	2 38	10.00
NOTE TO a.—Foals following the dam .....		
b. Steers and cows .....	Free.	
c. Oxen .....	1 42	6.00
d. Young cattle up to 2½ years old .....	4 76	20.00
e. Calves under 6 weeks old .....	95	4.00
f. Hogs .....	47	2.00
g. Suckling pigs under 10 kilos .....	59	2.50
h. Sheep .....	07	.80
i. Lambs .....	23	1.00
k. Goats .....	11	.50

*German customs tariff—Continued.*

Commodities.	Rates of duty.		
	In United States money.	In marks.	
<b><i>XL.—Oil-cloth, waxed muslin, waxed taffeta.</i></b>			
a. Coarse, not printed, oil-cloth (packing cloth) .....	100 kilos ..	\$2 85	12. 00
b. Other oil-cloth; also leather cloth, bookbinders' cloth .....	do ..	7 14	30. 00
c. Waxed muslin, waxed taffeta .....	do ..	11 90	50. 00
<b><i>XLI.—Wool, inclusive of animals' hair, not otherwise provided for, and manufactures thereof.</i></b>			
a. Wool, raw, dyed, painted; also hair, raw, hackled, boiled, dyed, and curled .....	Free.		
b. Combed wool .....	100 kilos ..	47	2. 00
c. Yarn (pure wool or mixed, not with cotton):			
1. Of cattle hair, single or double, of all kinds; wadding ..	100 kilos ..	71	3. 00
2. Nap, mohair alpaca yarn single, dyed or not, double undyed ..	do ..	71	3. 00
3. Double dyed, triple or more twist, dyed or not ..	do ..	5 71	24. 00
4. Other yarn:			
Raw, single ..	100 kilos ..	1 90	8. 00
Raw, double ..	do ..	2 38	10. 00
Bleached or dyed, single ..	do ..	8 85	12. 00
Bleached or dyed, double, triple, or more twist, raw, bleached, or dyed ..	100 kilos ..	5 71	24. 00
Manufactures, also mixed with cotton, linen, or metallic thread:			
1. Cloth selvage ..	Free.		
2. Coarse, not printed, not dyed felts ..	100 kilos ..	71	3. 00
3. Rugs, blankets, containing dyed or not dyed yarn of cattle hair ..	do ..	5 71	24. 00
4. Not printed felts, not belonging under No. XX; not printed felt goods and hosiery, and carpets, rugs, also printed; of wool or other animal hair, exclusive of cattle and horse hair; also mixed with vegetable fibers and other spinning materials ..	100 kilos ..	23 80	100. 00
5. Unprinted cloths and stuffs not included under No. VII ..	do ..	32 13	135. 00
6. Printed goods, not carpets or rugs, ribbon and button-makers' goods, plushes, tissues, mixed with metallic threads ..	100 kilos ..	35 70	150. 00
7. Laces, tulle, and embroideries; also woven shawls of three or more colors ..	100 kilos ..	71 40	300. 00
8. Woven shawls of five or more colors ..	do ..	107 10	450. 00
<b><i>XLII.—Zinc, also alloyed with lead or tin, and manufactures thereof.</i></b>			
a. Zinc in pigs or blocks, old zinc ..	Free.		
b. In sheets ..	100 kilos ..	71	3. 00
c. Coarse articles of zinc; also in connection with wood, iron, lead, or tin, not polished or lacquered; zinc wire ..	100 kilos ..	1 42	6. 00
d. Fancy articles of zinc, also lacquered; likewise zinc wares combined with other materials, provided they do not come under No. XX. 100 kilos ..	do ..	5 71	24. 00
<b><i>XLIII.—Tin, also alloyed with lead, antimony, or zinc, and manufactures thereof.</i></b>			
a. Tin in pigs or blocks ..	Free.		
b. In sheets ..	100 kilos ..	71	3. 00
c. Coarse tinwares, also in connection with wood, iron, lead, or zinc, not polished or lacquered; tinware ..	100 kilos ..	1 42	6. 00
d. Fancy articles of tin, also lacquered; likewise tinwares combined with other materials, provided they do not thereby come under No. XX. 100 kilos ..	do ..	5 71	24. 00

**BEET-ROOT SUGAR IN GERMANY.**

*Report, by Consul Potter, of Stuttgart, on the history and growth of the beet-root sugar industry in Europe, and the best means of introducing the industry into the United States.*

As experiments in the manufacture of beet-root sugar are being made upon a somewhat extended scale in some parts of the United States, I have presumed that a few statistics concerning its production in Europe, coupled with facts and opinions gathered from statements of the most intelligent and successful German manufacturers, might be of possible interest at this time.

Highly intelligent experts in the beet-root sugar industry of Germany, who have carefully studied the climate and soil of America, do not hesitate to express the opinion that in a few decades the United States will supply their own enormous sugar demand chiefly from the beet, as has been the case in Germany for many years past. The progress of this industry in the United States is being watched with the greatest interest by manufacturers in Germany, who, judging by the light and hasty manner in which this difficult subject is treated in some of the plans for new beet-sugar manufactories in the United States, predict that severe disappointment will be the result.

The following facts are therefore cited, not only as a timely warning, but also for the purpose of encouraging those who propose, in a judicious way, to embark in a noble enterprise that may lead to results of the highest importance to the agricultural interests of the country.

In the first place, which parts of the American Union appear to be most favorable to the production of the sugar-beet?

The map of Europe and the long experience of manufacturers and producers there furnish a ready answer: The northern part of France, Belgium, a part of Holland, the Lower Rhine district, Hanover, Brunswick, the neighborhood of Magdeburg and Halle, Silesia, Bohemia, and a portion of fertile Poland furnish by far the greatest part of the sugar product of Europe. In all of these countries, which are those best adapted to the culture of the beet, the richest lands are devoted to this purpose. Their climate is generally humid and too cold for grapes and Indian corn, not because the summer is too short for the latter, but because the average temperature from the end of March to the end of October is too low, and the humidity of the atmosphere at the same time too great. The countries named have, during the year, from 20 to 30, seldom more than 40, so-called summer days; that is, days when the thermometer rises to 77° Fahr.

The abundant dews, which are produced by cool nights, are a life element with a northern plant like the beet. South of 50° latitude in France and Germany there are but few sugar manufactories, and these are, by reason of the climate, more unfavorably located than those in the north. In Southern France proper, in Switzerland, Italy, and other countries of Southern Europe, there are no sugar manufactories, with the exception, perhaps, of a few that may have been established as an experiment, but which do not promise successful results. The reason of this probably is that in the northerly countries the growth of the beet goes on uninterruptedly during the summer in consequence of the greater moisture of the climate, while in autumn the cool nights check the further growth and develop the sugar in the roots.

In the warm countries of Central Europe, however, where Indian corn flourishes, the dry warmth of summer frequently impedes the growth of the sugar-beet, while the warm autumn encourages the growth *only* of the plant, instead of the formation of sugar. The development of sugar in the maple tree is similar to that in the beet, in this respect, that both require for this process warm sunny days and cold nights.

If, besides the northerly countries already named, there were no other parts of Europe adapted to the growth of the beet, viz, those parts having a hot summer, like that which generally prevails in the United States, the prospects of the latter, as a beet-sugar-producing country, would be very unfavorable. Fortunately, however, the eastern part of Europe, particularly the extended neighborhood of Kiew, in Russia, which is the chief center of the Russian beet-sugar industry, show that

the beet may be cultivated with great success in countries where the summer is hot, provided the climate is not too dry.

From the foregoing facts it is evident that the establishment of beet-sugar manufactories in the United States should not be undertaken until the subject in all its bearings has been carefully and thoroughly investigated, for it is, of course, an essential point in the successful management of every manufactory to have, not only in most years, but *every year*, a plentiful and certain supply of raw material of best quality at command.

Besides the climate, therefore, the matter of fertilization becomes a most important consideration. The beet plant draws its sugar mainly from the fertilizers used, and not from the body of the native soil. For this reason there need be no fear of exhausting the soil so long as it is highly manured. There is not in the vegetable kingdom, probably, another plant that will so quickly impoverish the soil when fertilization is insufficient or wholly wanting. It is, therefore, evident that success in the cultivation of the sugar-beet is dependent upon bountiful and unstinted fertilization. Even with this provision, every other year there should be planted different intervening crops upon the same soil. There are sugar plantations in Europe whose originally excellent soil has become totally exhausted, simply because of insufficient fertilization, and, as a result, the manufactories connected with them have failed.

A brief reference to the manufacture of sugar, from its beginning in Germany, may be of service to those proposing to engage in a similar enterprise in America.

As is well known that the sugar of the beet was discovered by a German chemist named Sigismund Marggraf. On the 3d of March, 1747, at a session of the Academy of Sciences, in Berlin, he stated that he had found, in several of the indigenous plants, the same kind of sugar as that in the cane, and that the Silesian beet contained the greatest proportion of saccharine matter. He also proved that the extraction of sugar from this plant by his method was not only possible but might also be made profitable.

Political disturbances prevented Marggraf from enjoying the honor of establishing the first beet-root sugar manufactory, but his pupil, Achard, founded the first establishment of this kind in Cunern, in Silesia, in the year 1790, and obtained six per cent. raw sugar and three per cent. molasses from the weight of the freshly harvested beets. Achard wrote to a friend in France concerning his success, and the subject was agitated there. His letter, in which he dwelt upon the advantages of the beet-sugar manufacture and its great benefits to agriculture, was published in all the newspapers of France, and created throughout the country quite a sensation. As a consequence, in the year 1800, two establishments for the manufacture of beet sugar were founded, by way of experiment, in St. Owen and Chelles, near Paris. The results, however, were so unfavorable and discouraging in comparison with those of the Silesian manufactory that this branch of industry was abandoned, and rarely referred to in France for many years afterward, except in terms of ridicule.

Some time later Napoleon I, in order to facilitate the accomplishment of the continental blockade, which was planned as a blow at England, encouraged the manufacture of beet-sugar by enormous appropriations of money. But with his fall most of the manufactories failed with heavy losses.

About the year 1812-'15, animal charcoal began to be employed for

the purpose of bleaching and purifying the sugar, thus opening a new era for this industry. This most important invention, in connection with further progress in chemistry and mechanics, was the means of calling into existence no less than 103 manufactories in France in the brief period of the 13 years previous to 1828. The total product of these 103 establishments was only 6,630,000 pounds of raw sugar, being an average for each manufactory of about 66,000 pounds, or the product of about 40 English acres of beets.

The German manufactories began even more cautiously, for in the year 1836, 122 establishments produced only 3,111,901 pounds of raw sugar, made from 56,761,530 pounds or 28,007 tons of beets, making an average for each manufactory of only 25,525 pounds of raw sugar and 459,250 pounds of beets, which would be about the yield of 20 English acres fairly cultivated, and producing an average of about 11 tons to the acre.

This commendable prudence and caution in the establishment and manipulation of manufactories in France and Germany was a consequence of former enormous losses, resulting from the attempts of enterprising men to engage extensively in a business which they did not understand, and before they had studied it with sufficient care to master the difficulties that stood in the way of success. Their experience should be a serious warning to producers in America, and admonish them to begin with small, very small establishments, and study every step taken until they have learned the business in its minutest details, and are sure of a profit on their labor and investments. Expansion and large investments in this industry will then be safe, for the demands of the market for their production will be substantially without limit. The planting of 100 acres would be a liberal beginning for the first year. With even this small beginning the planter might pay dearly for his agricultural experience before he had carried a single load of his produce to the "new factory."

The experience of properly keeping the beets after harvesting is often as dear as that gained by labor in their culture. As soon as the beets are taken from the ground, very shallow trenches are dug, and the beets are piled therein in such manner as to have at least three-quarters of the heap above the surface of the earth before covering.

The danger of heating in the heaps covered with earth is fully as great as that of freezing. This heating is caused by making the heaps too high, and the injury resulting therefrom, as in the case of fresh grain, can never be made good. For this reason, the cellar is a most objectionable place in which to store the beets. The first essential to safety is the ripeness of the beets, and a moderate temperature at the time of harvesting. The golden rule "out of the earth into the earth" is always to be kept in mind, for in the air, particularly when the sun shines, the roots soon wither and become soft and elastic, in some degree like rubber.

This is the first step toward decomposition, after they have been taken out of the ground, and is more to be feared than frost. If possible the beets should be buried or covered the same day that they are harvested, and should be placed in heaps not more than 2½ feet high by 3 feet broad, and should be covered just deep enough to prevent freezing. Straw is always dangerous on account of heating, decay, and mice.

That the caution of the German manufacturers was well advised is proved by the fact that the number of factories, which had risen in the year 1838 to 159, had decreased in the year 1845 to 96. From this depressed condition, with the assistance of past experience and new inventions, the industry progressed in a healthy manner, and the following

statistics show how steadily the average production of the different manufactories has increased up to the present time:

Year.	Number of manufactories in operation.	Total amount of raw sugar produced.	Average product of raw sugar in each manufactory.	Pounds of beets required for 100 pounds of raw sugar.	Remarks.
		<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	
1836 .....	122	3, 111, 901	25, 525	1, 989. 00	About 20 pounds beets to 1 pound sugar.
1845 .....	96	33, 489, 014	348, 848	1, 624. 35	About 16 pounds beets to 1 pound sugar.
1850 .....	184	117, 901, 179	640, 789	1, 514. 90	About 15 pounds beets to 1 pound sugar.
1855 .....	216	193, 063, 832	893, 834	1, 381. 25	About 14 pounds beets to 1 pound sugar.
1860 .....	247	279, 622, 460	1, 132, 072	1, 281. 80	About 12½ pounds beets to 1 pound sugar.
1865 .....	295	410, 387, 276	1, 391, 089	1, 292. 85	
1870 .....	304	581, 200, 697	1, 911, 871	1, 281. 80	
1875 .....	310	785, 092, 497	2, 468, 017		
1877 .....	326	848, 260, 659	2, 568, 017		
1878-'79 .....	329	850, 850, 000	2, 585, 700		

NOTE.—In the years 1860 and 1870 the quality of the beets raised was unusually good.

The weights above given are stated in English pounds.

The progress made in the process of extracting sugar from beets is shown by the gradually decreasing amount of beets required to produce a certain weight of sugar. In the year 1836 about 20 pounds of beets, and in 1860 only about 12 pounds were needed to make 1 pound of raw sugar.

The production of beet-sugar in all Europe during the four years ending June 30, 1879, was as follows:

Year.	Weight.	Weight.
	<i>Centners.</i>	<i>English pounds.</i>
1875-'76 .....	27, 452, 255	3, 033, 474, 477
1876-'77 .....	22, 022, 823	2, 433, 521, 941
1877-'78 .....	28, 416, 544	3, 140, 028, 112
1878-'79 .....	28, 200, 000	3, 116, 100, 000

The total production for the year 1878-'79 was divided among the several European countries as follows:

Countries.	Weight.	Weight.
	<i>Centners.</i>	<i>English pounds.</i>
Germany .....	7, 700, 000	850, 850, 000
France .....	7, 600, 000	839, 800, 000
Austria-Hungary .....	6, 700, 000	740, 350, 000
Russia and Poland .....	4, 300, 000	475, 150, 000
Belgium .....	1, 300, 000	145, 650, 000
Holland and other countries .....	600, 000	66, 900, 000
Total .....	28, 200, 000	3, 116, 100, 000

Showing a consumption of about 10 pounds per year, or less than half an ounce per day, to each inhabitant of Europe.

Upon this historical basis perhaps a better view may be taken of the general considerations connected with the establishment of beet-sugar manufactories in the United States. Taking, as a basis of judgment, the facts developed by the beet-sugar production of Europe, the climate of the New England States, the vicinity of the great lakes, and in the

same direction or zone westward, would appear to be the localities most favorable for the production and culture of the sugar-beet. But, in view of the important fact that the so-called Indian summer of the Middle States is very favorable to the best development of sugar in the beet, the boundary of successful cultivation may be possibly extended to the Ohio River. It may, however, be considered hazardous to undertake this industry south of this line, unless tests and experience shall prove the contrary.

Besides the Indian summer, the United States has another important advantage in the fact that the spring season, although somewhat late, continues warm from its beginning, and is, therefore, for the young beet more favorable than the cool, moist weather which sometimes occurs in Germany in the months of April and May.

In considering the cost of cultivating and harvesting the sugar-beet the farmer of the United States may safely consider himself as possessing a high per cent. of advantage over the European farmer in the vastly superior machinery for harvesting and cultivating which is always at his command. He will also be free from the enormous *ad valorem* tax\* which the German farmer is obliged to pay upon his beets before they are crushed at the sugar factory. In the process of manufacture in late years many improvements have been introduced. The present diffusion method (extracting the sugar with water) does not require more than half as many workmen as by the former method of hydrostatic pressure.

It may also be considered a fortunate circumstance for the United States of America that the manufacture of beet-sugar has not heretofore been attempted on an extensive scale. The European farmers and manufacturers have suffered all the discouragements and losses incident to twenty years of experiments in developing this industry before it began "to pay." This development has been slow because the disasters resulting from such experiments had made those engaged in the enterprise very cautious until perfection in methods of manufacture had been nearly attained. The advantages of all this expensive and tedious experience is now available to the people of the United States, and there seems to be no reason why the inauguration of this great industry into many of the different States of the Union should not be met, on all sides, with substantial and hearty encouragement. With a more favorable climate and a boundless area of better soil, with superior machinery and cheaper fuel, with labor in abundance and an unlimited market there appears to be no obstacle in the way to prevent the manufacture of beet-root sugar from being prosecuted with a degree of success in the United States far in advance of that attained by European producers and manufacturers.

The enormous advantages of sugar-beet planting to the agriculture of a country having a domain so extensive as that of the United States cannot be estimated too highly. These will become evident when a farmer, having the advantage of a favorable climate and suitable soil, begins operations with a small plantation and gradually increases his business, according to his success, until he arrives at independence, which he surely will do, with prudent and skillful management and proper surroundings.

No industry could probably be introduced into the United States that would more rapidly add to the wealth of the country and the contentment of its people, for its prosecution requires a large number of workmen, and its product comes wholly from the soil. For these reasons,

\* The imperial tax collected by the German Government upon sugar-beets raised within its jurisdiction amounts to more than 80,000,000 marks per annum.

and with a favorable commencement, it is not extravagant to predict that its growth would be so rapid that in a few decades the sugar production of the United States, as an article for home consumption and export, would rank second only in importance to the great staple productions for bread.

In conclusion, it is proper to refer to the subject of suitable sugar-beet seed for America. Germany and France produce two varieties of sugar-beets. The first produces a comparatively small weight to the acre. But these are not only much richer in sugar than the other kind, but grow entirely underneath the soil, a fact of much importance to the farmers of America, where there are often severe frosts in the month of October. In France the frost rarely appears in November, and consequently the French beets, which frequently grow half above ground, are not greatly endangered. The German sugar-beet seed is, therefore, greatly to be preferred for the climate of the United States. It is predicted that the difference in the product of these two varieties of seeds will be so great in the United States as to produce in the manufacture of sugar success with one variety, and by reason of frost, &c., perhaps, entire failure with the other.

The seed of the Silesian beet and the seed grown in the vicinity of Magdeburg are most to be recommended.

J. S. POTTER.

UNITED STATES CONSULATE,  
Stuttgart, November 1, 1879.

---

[Supplement to the foregoing report.]

## BEET-ROOT SUGAR MACHINERY AND MANUFACTORIES.

*Report, by Consul Potter, of Stuttgart, Germany, on the estimate of costs (from the Braunschweig manufactory) for the construction of machinery for the manufacture of sugar from beet roots and for the fitting up of a sugar manufactory capable of working up 100,000 kilograms of beet roots daily. Also for a manufactory of a capacity for 500,000 kilograms daily.*

With a view of furnishing to those interested information as full as possible concerning the manufacture of beet-root sugar in Germany, I herewith forward carefully prepared estimates for the construction of machinery for a mill, complete in all particulars, for the manufacture of sugar from beet roots.

These estimates are furnished by an establishment well known in Europe as being among the most responsible and advanced in the manufacture of the best quality of improved machinery for the purpose named, and they provide for a mill capable of working up 100 tons of beets daily and also for a mill with a working capacity of 500 tons daily.

The manufacture of beet sugar by hydrostatic pressure is now obsolete in Germany, the diffusion process being adopted instead, because the percentage of sugar obtained from the beets has been largely increased by the latter method. By the old process 20 to 30 pounds of beets were required to produce 1 pound of sugar. By the new method 10 to 12 pounds only of beets, of good average quality, produce 1 pound of sugar,



besides a considerable percentage of molasses. The estimates herewith submitted are for the most improved machinery for the modern diffusion process.

A plan of a building for a medium-sized mill is also herewith submitted. It should be remembered that the measurements and figures thereon represent *millimeters*.

I have attached to the estimates furnished copies of the letters received from the Braunschweig Company, in order that those interested in the subject may be made familiar with the responsible character of the statements therein contained.

A table showing all the elements of cost that enter into the production of sugar by the improved German methods is also given. This table is made up from the carefully tested average results of three years' operations of a well-organized and successful manufactory in the northern part of Germany, and may be confidently relied on as accurate. The German Government collects a revenue tax on the value of the beet roots after they are washed and ready for cutting. The official collecting this tax has a room in every manufactory and superintends the weighing of the beets. As the American manufacturer will not have to bear a similar burden this important item of cost has been omitted in the table referred to.

For the benefit of the farmer proposing to engage in the culture of the sugar beet, I will suggest that deep, rich, moist, bottom land is dangerous ground upon which to experiment with a view of obtaining successful results. From such lands he may obtain enormous crops in bulk and weight (20 to 25 or more tons per acre), but his product will be merely water with very little sugar, and the more tons he raises the more complete will be his failure. He will furnish the manufactory with a large amount of bulky material, while the product in sugar will be very discouraging. It is well known that many of the French farmers, who cultivate a kind of beets which grow very large and partly above ground, often produce 30 tons to the acre, and yet utterly fail in the business, while the prudent and thinking German succeeds admirably with smaller beets, producing 11 or 12 tons to the acre. In one case a great weight of water is produced, containing a small amount of saccharine matter, while in the other a beet is produced rich in sugar properties, and yielding more pounds of sugar to the acre with less than half the labor and cost of production.

Rolling, and even hilly land, where there is not an excess of moisture, is best for the sugar-beet. It should be strong and well enriched. One of the very best fertilizers is wood-ashes, and material containing alkaline properties. The elements that produce sugar in the maple-tree will develop sugar in the beet. In this connection it may be mentioned that ashes from the wood of the sugar-maple tree are regarded as among the most valuable of all ashes in the production of potash.

These hints will be quite enough for the intelligent farmers of the United States, and if those who propose to engage in the culture of sugar-beets will carefully study the subject they wish to master, and remember that they should seek to produce the largest quantity of sugar in the smallest amount of raw material, and that it is concentrated substance and not bulk or magnitude of material that is wanted, success in sugar-beet culture will be assured.

The reduction in the cost of a mill smaller than the one for which estimates in detail are herewith furnished would not, of course, be in proportion to its reduced capacity. I have equally complete esti-

mates for a manufactory capable of working up 500 tons of beets daily. The recapitulation only of the total cost of such an establishment is given.

In order to insure the success of the experiment in making sugar from beet-roots in the United States, it is safe to recommend the construction of an establishment large enough to control all the economical advantages which science and late discoveries present.

For further information I would refer to the following letter, received from the directors of the "Braunschweigische Maschinenbau Anstalt in Braunschweig":

BRAUNSCHWEIG, March 22, 1880.

SIR: From the inclosed note you will see that at the price for beet-roots of 1.034 marks per centner, 0.800 mark duty, the hundred-weight of beet-roots will cost, to be worked up, 2.617 marks, including both sums. Consequently, without duty, which we understand is not paid in America, the cost is reduced to 1.817 marks.

The amount of coals used will depend upon the size and construction of the manufactory; 12 to 30 per cent. of coals to the weight of beet-roots is required. If we reckon the cost at 1 mark, you will see from the inclosed note that here in Germany about 15 per cent. coals are used.

With regard to wages, 0.158 mark is, as you will observe, paid per centner of beet-roots, the men earning, on an average, 1.75 to 2 marks, the women 1 to 1.20 marks per day. All other details you will find in the table following.

The calculation of cost for the production of 1 centner raw sugar in America, resulting herefrom, is very simple. The result will differ according as you take 10, 11, 12 or more centners beet-roots to the centner of sugar. With good beet-roots we require here, with the three grades of product, 10 centners of roots to 1 centner of sugar. One centner sugar will, therefore, cost 10 times 1.817 = 18.17 marks, without duty. Besides this, there will be a gain of about 3½ per cent. molasses on the weight of beet-roots, which represents a value of about 5 marks per centner, according to present prices.

There still remains the food product for cattle, &c., the value of which we presume the American farmer understands, and we have not, therefore, given it a price.

I am, sir, yours, most respectfully,

BRAUNSCHWEIGISCHE-MASCHINENBAU ANSTALT:

M. HECHT.

Hon. J. S. POTTER, U. S. Consul.

The following table shows in detail the average cost of extracting, by improved German machinery, the raw sugar produced by 1 cwt. of beet-roots of good average quality:

Table showing average cost of working up 1 centner beet-roots, the product of which is about 10 per cent. raw sugar and 3½ per cent. molasses = 11 pounds sugar and 3.65 pounds molasses.

Elements of cost.	German marks.	United States cents.
1 centner beet-roots, washed and ready for cutting .....	1.034	24.61
Coal .....	0.153	3.90
Coke .....	0.011	
Muriatic acid .....	0.004	
Bone charcoal .....	0.019	1.09
Materials .....	0.028	
Press-cloths .....	0.006	
Sacks .....	0.017	2.23
Limestone .....	0.006	
Repairs .....	0.005	
Wages .....	0.158	4.78
Salaries .....	0.043	
Interest .....	0.101	
Miscellaneous expenses .....	0.022	6.61
Commissions .....	0.015	
Insurance .....	0.017	
Wear and tear, depreciations, &c .....	0.123	
	1.817	43.22

It will be seen by the foregoing table that the cost of producing clear raw sugar from beet-roots in Germany is about 4 cents per pound. After the sugar there still remains a considerable percentage of molasses, the value of which should be credited to the cost of producing the sugar, thus reducing the actual cost of good raw sugar from beet-roots to about 3½ cents per pound.

The value of the residuum as food for cattle or manure will be estimated according to the demand for it existing in the neighborhood of the factory.

BRUNSCHWEIG, *March 12, 1880.*

SIR: Respectfully referring to your note of the 4th instant, we have the honor to submit to you the inclosed two estimates for the complete fitting up of sugar manufactories for the working up of beet-roots, in the one case of 100,000, in the other of 500,000 kilograms daily.

These estimates cannot be considered entirely reliable *under all circumstances*, as a knowledge of the building locality and water privileges are indispensably necessary for the drawing up of binding contracts. They may, however, be regarded as essentially correct, and only subject to unimportant changes.

We add drawings of the ground plan of a middle-sized manufactory, and are prepared to give further details.

According to your wish, we have the honor to forward you two copies of the ground plan of the sugar manufactory, Jüllich; and at the same time beg to state that we will willingly send one or two skillful engine-fitters to America with the machines to assist in their erection; for whom, besides free passage there and back and entirely free accommodations, 10 marks per man and per day, including time of journey, would be required.

Yours, most respectfully,

BRUNSCHWEIGISCHE-MASCHINENBAU ANSTALT:  
M. HECHT.

Hon. J. S. POTTER,

*Consul of the United States of America in Stuttgart.*

*Estimates for sugar manufactory.*

No.	Machinery, fixtures, &c.	Kilograms.	Price.	Total.
A.—MACHINERY AND APPARATUS.			Marks.	Marks.
1	2 beet-root washing-machines with perforated iron *5½, strong metal drums, and with iron boxes, each of *3,250½ length. The drums have a diameter of 1,100½, are provided with crosses forged in a piece, and one of them has a stone sorter. The machines have each 2 deposit-valves, 2 manhole plugs, gasellers and communicating cylinders, including stationary and loose pulleys . . . . . per piece . . . . .		3,000.00	6,000.00
2	2 beet-root wagons capable of containing 500 kilograms, per piece . . . . .		350.00	700.00
3	1 cutting-machine with a disk, armed with 8 boxes and communicator, with stationary and loose pulley and disengaging gear, and with filling funnel . . . . . per piece . . . . .			2,100.00
4	16 blade-boxes for the same . . . . . per piece . . . . .		30.00	480.00
5	10 sets of finger-blades for the same . . . . . per set . . . . .		32.00	320.00
6	10 sets of lateral cutting-blades for the same . . . . . do . . . . .		40.00	400.00
7	2 railroad cutting-wagons of sheet-iron, with filling funnels . . . . . per piece . . . . .		230.00	460.00
8	70 running rails, including the necessary tenter-hooks, per running millimeter . . . . .		1.20	91.00
9	14 diffusers of 1,100½ and 1,570½ height in the direct plates, complete each with 2 manholes, the upper one with horizontal covers capable of being turned, the lower one with strong covers hanging on hinge-joints. These are arranged for caoutchouc packings, to be tightened by means of wrought-iron hoops and span-screws. On the jars are brackets for the reception of transferable pipe-supports and props for the junction of the conduit of pipes, per piece, 925 kilograms. . . . .	12,950	53.00	6,863.50
10	14 metal stop-cocks for the same of 20½ . . . . . each . . . . .		9.00	126.00

\* The measures are given always in millimeters, and the weight in kilograms.

*Estimates for sugar manufactory—Continued.*

No.	Machinery, fixtures, &c.	Kilograms.	Price.	Total.
A.—MACHINERY AND APPARATUS—Continued.			<i>Marks.</i>	<i>Marks.</i>
11	14 perforated wrought-iron sieve-bottoms to be inserted in the upper man-holes of the diffusors, and 14 similar ones for the lower vaulted bottoms of the jars. The jars receive the whole diameter of the diffusors, and lie with the lower inner edge of the man-hole in an horizontal position at 50 kilograms each	700	0.75	525.00
12	14 calorimeters, each of 1.5 square meter heating-surface with brass pipes and stuffing-box packing per piece		250.00	3,500.00
13	14 steam-port valves of 33½ do.		24.00	336.00
14	14 self-acting steam exhaust port-valves of 26½ with gauge-cocks do.		26.00	364.00
15	14 thermometers do.		15.00	210.00
16	14 transferable pipe-supports do.		9.00	126.00
17	14 wrought-iron loosening keys do.		6.00	84.00
18	14 guide-eyes to the same do.		3.00	42.00
19	2 keys to the man-holes of the diffusors do.		6.00	12.00
20	1 metal purging-cock do.			20.00
21	57 valves of 78½ with red-brass spindles and stuffing boxes, with wrought-iron hoop, so constructed that the conical valves do not turn do.		50.00	2,850.00
22	7 wrought-iron winch cranks do.		3.00	21.00
23	A complete cast-iron set of pipes, with cut flanges and bored screw-holes per kilogram	2,000	33.00	660.00
24	28 4-edged caoutchouc packings for the man-holes of the diffusors each		6.00	168.00
25	To about 280 drillings, the requisite caoutchouc sheaves and screws each		2.00	560.00
26	Iron foundation below the diffusors consisting of cast-iron horses and square supports, including hooping per kilogram	2,500	24.00	600.00
27	1 cutting-worm between the diffusors, including wrought-iron trough and motor per kilogram	2,750	63.00	1,732.50
28	Flooring plates with perforated metal between the diffusors per kilogram	800	0.70	560.00
29	2 improved cutting presses each		1,325.00	2,650.00
30	1 distributing worm-screw to the above presses, including wrought-iron trough, &c., omitted.			
31	6 deposit-boxes for cuttings on the cutting floor each		60.00	360.00
32	The entire communication of motion for the whole of the working-machines (driving-engines), with all of the iron parts for the elevators and transports, for the moving of the beet-roots and beet-roots cuttings, as well as the coal, the brackets, the drop, &c., consisting in well-made rollers, pulleys, wheels, bottom-plates, and brackets with metal pillars, &c. per kilogram	35,000	63.00	22,050.00
33	Tin pockets and chains for the protractors do	200	1.30	260.00
34	90 wooden fillets each		.56	45.00
35	320 fastening screws do.		.50	160.00
36	Wrought-iron chains with steel screw-bolts in drawn wrought-iron pipes per kilogram	800	1.10	880.00
37	1 grindstone for the blades, with iron trough, including stationary and loose pulleys.			150.00
38	4 complete separating pillows of 1,500½ and 1,700½ height in the direct plates, with armature to the same, consisting in: 1 passage-valve, 1 steam-valve, 1 carbonic-acid tube, 1 carbonic-acid worm, 1 steam-valve, 1 juice outlet valve, 1 scum-worm, 1 juice inlet valve, 1 knee and 1 cross support, 1 passage-cock, 2 guide-eyes, 2 loosening rods, 1 winch crank, and (saturer), with cover and drying tube per piece		850.00	3,400.00
39	4 tubes for saturer as before do.		850.00	3,400.00
40	2 chalk measuring barrels, each with two cocks each		100.00	200.00
41	6 scum-filter presses, each with 18 chambers; each chamber with fluted lateral planes, unscrewed sieve plates, a metal drilling apparatus for the cloths, and an outlet cock, the valves with turned wrought-iron columns, wrought-iron cones each		1,200.00	7,200.00
42	1 stone-catcher, with sieve			100.00
43	6 sugar centrifugal machines, with welded drums and full bottom-plates, with protecting hoop each		1,000.00	6,000.00
44	1 complete double mash machine			1,350.00
45	1 sugar carriage with juice-catcher			120.00
46	2 iron washing basins, with pipe connected below them, and 2 outlet-cocks			875.00
47	1 complete coal washing-machine, with wheel communicator entirely of iron			2,200.00
48	1 tilting apparatus for the same			150.00
49	All the iron parts to 3 Langen coal heating-furnaces, with firing in tiers, trisected heating-cylinders, and with self-acting withdrawing apparatus, excepting dryer, each with 28 cylinders, with hard-soldered cooling pipes of sheet-iron per piece		1,950.00	5,850.00

## Estimates for sugar manufactory—Continued.

No.	Machinery, fixtures, &c.	Kilograms.	Price.	Total.
<b>A.—MACHINERY AND APPARATUS—Continued</b>				
50	Drying-plates for the same, with registers..... per kilogram.....	4,500	<i>Marks.</i> 22.00	<i>Marks.</i> 990.00
51	3 collecting-boxes for the coal-heating furnaces, with slides, each.....		180.00	480.00
52	2 water-pressure engines, including hooping..... each.....		800.00	1,600.00
53	3 coal transport-carts..... do.....		160.00	480.00
54	All the iron parts to a lime-kiln, with 3 flanges and 3 outlets, including tin-case and pipe.....			2,000.00
55	1 coal-boiling apparatus, with 3 barrels of 1,100 $\frac{1}{2}$ and 1,570 $\frac{1}{2}$ height in the direct plates complete, with all the connecting pipes below them, and valves, metal slides, tinned wire-sieves and collecting-pipe.....			2,700.00
56	1 double chalk-slaking barrel, with clack-valves.....			320.00
57	1 lime-water barrel, with fine wrought-iron grate and valve.....			320.00
58	1 stirring apparatus to the lime-water, with wrought-iron barrel.....			300.00
59	1 lime-pump of 22 per cent., with rod.....			375.00
60	1 filling-funnel for the filter.....			30.00
61	1 filling-funnel for the coal-boiling apparatus.....			40.00
62	1 exhaust-steam box for the Schützzenbach apparatus.....			425.00
63	1 lying-working machine with 365 $\frac{1}{2}$ and 828 $\frac{1}{2}$ lift, with patent regulator, including grappling and closing valve.....			4,000.00
64	1 lying-machine of 300 $\frac{1}{2}$ and 525 $\frac{1}{2}$ lift, with patent regulator, including grappling and closing valve for the sugar-house.....			2,700.00
65	1 lying-machine of 235 $\frac{1}{2}$ and 525 lift, with patent regulator, including grappling and closing valve for the coal-house.....			2,000.00
66	1 machine of 157 $\frac{1}{2}$ and 26 $\frac{1}{2}$ lift, including grappling and closing valve for the lime-station.....			900.00
67	2 double-working feeding-pumps of 100 $\frac{1}{2}$ and 200 $\frac{1}{2}$ lift, including grappling and closing valve..... each.....	1,300.00		2,600.00
68	1 balance water-pumping engine of 365 $\frac{1}{2}$ and 785 $\frac{1}{2}$ lift, with 2 simple working water-pumps of 315 $\frac{1}{2}$ and 2 feeding-pumps of 105 $\frac{1}{2}$ , including hooping and valve.....			7,320.00
69	1 balance air-pumping engine of 365 $\frac{1}{2}$ and 785 $\frac{1}{2}$ lift, with 2 air-pumps of 420 $\frac{1}{2}$ and 2 heaping-pumps of 210 $\frac{1}{2}$ , including hooping and closing valve.....			8,580.00
70	Special pipes and air-chamber..... per kilogram.....	2,400	32.00	768.00
71	2 pump-valves of 210 $\frac{1}{2}$ each, with 1 suction-bucket..... each.....		135.00	270.00
72	1 carbonic-acid steam-pump of 470 $\frac{1}{2}$ and 525 $\frac{1}{2}$ lift, including hooping and closing valve.....			4,000.00
73	1 safety-valve for the carbonic-acid pump.....			125.00
74	1 return-valve.....			75.00
75	Various valves with red brass cones and spindles, well-finished wrought-iron columns and wrought-iron fllets, 39 $\frac{1}{2}$ , 52 $\frac{1}{2}$ , 65 $\frac{1}{2}$ , 78 $\frac{1}{2}$ , 92 $\frac{1}{2}$ , 105 $\frac{1}{2}$ , 131 $\frac{1}{2}$ , at 28, 35, 45, 55, 65, 75, 105 marks..... each.....			5,000.00
76	14 plugs and fermenting-tube..... each.....		10.00	140.00
77	1 simple gin with 125-meter chain and roller, with hold-fasts to the same to the lime-crane.....			275.00
78	1 gin with double communicator and 12-meter chain, 1 roller with hold-fasts to it.....			375.00
79	All the cast-iron pipes with turned flanges and bored screw-holes in normal lengths..... per kilogram.....	17,500	25.00	4,375.00
80	The same in unnormal lengths..... do.....	2,000	28.00	560.00
81	Special knee and support pipes..... do.....	10,000	32.00	3,200.00
82	8 filters, about 115 to 9,200 kilograms, 5 montages, 1 retour d'eau, 3,600..... per kilogram.....	12,800	51.00	6,528.00
83	Sieves and stands to the filters..... do.....	150	0.75	112.50
<b>Total A.....</b>				<b>151,274.50</b>
<b>B.—COPPERSMITH'S WORK.</b>				
1	a 1. Copper vacuum in ball form of 2,040 $\frac{1}{2}$ , with high dome, double bottom, and double worm of 80, respectively, 105 $\frac{1}{2}$ and conus (milling apparatus) of 260 $\frac{1}{2}$ ..... per kilogram.....	2,750	270.00	7,425.00
	b. All the water, steam, and juice valves in triple positions, per kilogram.....	250	270.00	675.00
	c. Vacuum-barrels and complete conus motion, vacuum-gauge, thermometer, glass tubes, eye-glasses, and India-rubber conus.....			675.00
2	1 evaporating-apparatus, standing in 2 bodies of together 240 square-meter heating-surface, with complete garniture.....			15,800.00
3	2 condensators for conus-injection..... each.....		750.00	1,500.00
4	Filtration to 8 filters, consisting in 8 cast-iron pipes, 8 cast-iron outlet-knees, 8 brass air-cocks, 8 brass 39 $\frac{1}{2}$ knee-valves, contra steam, 8 brass 39 $\frac{1}{2}$ knee-cocks and water, 8 brass 39 $\frac{1}{2}$ knee-cocks, dam juice, 8 brass 39 $\frac{1}{2}$ knee-cocks, thick juice, 8 brass 39 $\frac{1}{2}$ passage-cocks, rising, 8 brass 39 $\frac{1}{2}$ outlet-valves, with complete copper-pipe connection (the pipes below)..... each.....		650.00	1,500.00
5	Copper worms and knee..... per kilogram.....	1,000	270.00	2,700.00

*Estimates for sugar manufactory—Continued.*

No.	Machinery, fixtures, &c.	Kilograms.	Price.	Total.
<b>B.—COPPERSMITH'S WORK—Continued.</b>				
6	Straight copper pipes ..... per kilogram..	1,500	<i>Marks.</i> 24 . 00	<i>Marks.</i> 3,600. 00
7	Rose copper ..... do .....	1,200	225. 00	2,700. 00
8	Hard solder ..... do .....	900	180. 00	1,620. 00
9	Borax ..... do .....	200	180. 00	360. 00
10	Tin ..... do .....	400	204. 00	816. 00
11	Small copper utensils ..... do .....	300	276. 00	828. 00
12	Wrought-iron plates ..... do .....	3,000	100. 00	3,000. 00
13	Various iron screws ..... do .....			1,800. 00
14	Various screws with turned heads and brass female screws .....			400. 00
15	Various brass valves and cocks with red brass cone and cube ..... per kilogram..	2,000	270. 00	5,400. 00
16	Wrought-iron pipes, 32, 44, 57, 69, 82, 95, 108, 121, 134½, at 1.65, 1.80, 2.15, 2.70, 3.60, 4.15, 5.55, 7, 0.8, 60 marks per meter .....			9,000. 00
17	Tin pipes and drying-stove pans, &c..... per kilogram..	3,000	100. 00	3,000. 00
<b>Total B .....</b>				<b>66,265. 00</b>
<b>C.—OTHER ARTICLES.</b>				
Leather straps, girths, tin buckets, Schützenbach boxes, screws, India-rubber packings, and other minor articles .....				12,000. 00
<b>RECAPITULATION.</b>				
A.—Machines and apparatus .....				151,274. 50
B.—Coppersmith's work .....				66,265. 00
C.—Other articles .....				12,000. 00
D.—Unforeseen things .....				20,460. 50
<b>Total .....</b>				<b>250,000. 00</b>
<b>Total in United States gold .....</b>				<b>\$59,590. 00</b>

The cost of machinery for a manufactory capable of working up 500,000 kilograms (or 500 tons) daily, will be as follows:

	<i>Marks.</i>
A.—Machines and apparatus .....	329,271. 50
B.—Coppersmith's work .....	294,785. 00
C.—Other articles .....	40,000. 00
D.—Unforeseen things .....	35,943. 50
<b>Total .....</b>	<b>700,000. 00</b>
<b>Total in United States gold .....</b>	<b>\$142,000. 50</b>

About 6 per cent. will be added for seaworthy packing and for delivering on board steamer at Bremen.

UNITED STATES CONSULATE,  
Stuttgart, April 5, 1880.

J. S. POTTER.

## BEET-SUGAR PRODUCTION AND PROTECTION TO EMPLOYÉS IN FACTORIES IN GERMANY.

*Report by Consul Fox, of Brunswick.*

### BEET-SUGAR PRODUCTION IN BRUNSWICK.

In reference to the beet-sugar campaign in the Duchy of Brunswick in 1879-'80, I have the honor to report as follows:

There were in operation thirty factories, working 4,573,097 metercentner beets, against twenty-nine factories which worked 4,100,000 metercentner beets in the preceding campaign; 395,300 metercentner of sugar was manufactured, against 400,000 metercentner in the preceding year. It will thus be observed that one more factory was in operation, 400,000 metercentner more beets raised, yielding a trifle *less* sugar than in the preceding year. This is accounted for by the unfavorable weather

during the summer of 1879, and the enormous damage done by caterpillars ("Raupenfrass") in certain districts. Both of these circumstances affected the beets materially. Notwithstanding this, however, the factories, as well as the farmers, obtained a satisfactory pecuniary result. The former, owing to the failure of the crops in other countries, obtained higher prices than previously (viz, 68 marks per metercentner against 60 marks in 1878-'79); the latter, through a larger yield per acre than in the previous year. The cost of labor, production, manufacture, and refining was about the same as in former campaigns.

The sugar manufacturers in this duchy are now engaged with the "water question." The large quantities of water used in the manufacture of sugar naturally becomes fouled by the organic substances with which it is brought in contact, so that the streams into which the waste water is emptied have such a bad odor that they are a public nuisance and detrimental to health. Several plans have been proposed to remedy this evil, one to deaden the organic matter by absorption, another to filter the water by running it over gravel and sand beds and thence into neighboring fields, where it will then do service as manure. Various experiments will be made in the next campaign. I shall report fully upon the result obtained.

#### PROTECTION OF EMPLOYÉS IN FACTORIES.

A further question which will affect manufacturing interests in Germany generally is the proposed new law in relation to the protection of employés in factories against injury and loss of life. Should the law pass in its present sweeping form, it must embarrass the manufacturers, to say the least. In anticipation of this, several of the leading industrial establishments in this city have circulated a petition designed to be presented to the German Parliament, setting forth the many objections to the law in its present form, and requesting a modification of the same. It is maintained that the proposed law oversteps the mark—is too special, and detrimental to the employer as well as the employé. Its enforcement would require many factories to remain idle for some time, a general rebuilding and remodelling being necessary to meet with its requirements. The petition prays:

1. That the law to be passed be simply a general law to afford the workmen in factories protection against injury and loss of life.
2. That all special provisions be in the form of working regulations, so drawn as to meet the requirements of each branch of manufacture.
3. That the interpretation of the law in the formation of regulations for the working of each individual branch of manufacture be left to a commission composed of experienced practical men.

The passage of this law is considered a political necessity, as it will wrench an important weapon from the hands of the agitators and leaders of the Social-Democratic party, which organization exerts no inconsiderable influence in this community.

WILLIAMS C. FOX.

UNITED STATES CONSULATE,  
*Brunsvick, May 13, 1880.*

## TECHNICAL EDUCATION IN GERMANY.

*Report, by Consul Potter, of Stuttgart, on the Royal Technical High School University of Stuttgart, and on the comparative value of degrees conferred by American and German Universities.*

## THE ROYAL TECHNICAL HIGH SCHOOL IN STUTTGART.\*

The Technical High School, or, as it was recently called, "The Royal Polytechnicum," in Stuttgart, on the 25th of last October, 1879, celebrated, by a succession of brilliant festivals, the fiftieth anniversary of its foundation, and, at the same time, the inauguration of a new and beautiful wing, which has been added to the imposing structure already existing. I avail myself of this occasion to bring to notice the origin, growth, course of studies, management, and general government of one of the largest and most important of the technical schools of Germany.

*The building.*—The Technical High School building is a massive structure in renaissance style, with two façades—one fronting on Allen street, and the other, the new wing, on See street. The new wing, though strictly harmonizing in style with the older part of the building, has some beauties peculiar to itself. Not the least of these is its situation, overlooking, as it does, the celebrated "Stadt Garden," with its artistically and botanically arranged beds of indigenous and exotic flowers, its tropical plants, and rich collection of conifera, sparkling fountains, &c. Its portal, a masterpiece in architecture and workmanship, is embellished with two statues standing in niches on either side, one representing the revival of science, in Keppler, the other a revival of art, in Albrecht Dürer. The caryatides at the portals of both wings represent Science, with the star, and Art, with the flame.

Ten statues, allegorical representations of the various technological studies, are flanked by bass-reliefs, which, with the corinthian columns supporting each story, gives the building a grand and imposing appearance.

The vestibule is remarkable for its beautiful marble pillars, the delicate color of which (rouge antique) harmonizes effectively with the prevailing colors in the great hall and on the grand stairway that leads to the second story.

The ornamentation is Italian, and perfect in its simple elegance. The surrounding paintings, which represent the different branches of technology, were executed in Munich, and are masterpieces of art.

The hall of conference, which is entered from the vestibule, is a spacious and very pleasant apartment, and its social characteristics leave impressions with the visitor which are most agreeable.

The prevailing tint is a warm brown, and the ceiling is divided into nine fields, containing the arms and devices of the nine greatest technical institutions of Germany, viz, Berlin, Stuttgart, Munich, Dresden, Karlsruhe, Darmstadt, Hanover, Braunschweig, and Aachen.

The motto, visible on the scroll of the royal arms, "*Non odit artem nisi ignarus.*" must find an echo in the hearts of all who feel the natural satisfaction that the sight of the harmonious whole conveys.

The new building contains altogether 103 halls and rooms, several of the finest of which, on the top story, are devoted to the libraries and

\* I desire to acknowledge, gratefully, my obligations to Prof. C. Lobenhöfer, of the Royal Technical High School University, for the information contained in the report regarding the course of studies, government, &c., of the institution.—J. S. POTTER.



reading rooms. The whole is heated by a combination of steam and hot air.

*The institution.*—The idea of forming a polytechnic institution in Würtemberg was first suggested in the year 1825. Similar institutions then existed in Vienna and Prague, their principal object being to teach, practically, different branches of trades. This was not precisely what Würtemberg wanted, for the reason, among others, that the expense was great. It desired, rather, a scientific preparation for the traders in general—a school for fabricants, merchants, apothecaries, miners, builders, &c. Military technic might be added in course of time, and, in any case, future teachers were to be prepared for the realschool. A plan to this end, after having taken several years to mature, was laid before the King by the minister of the home, church, and school department, on the 22d of March, 1829. An eighth class was proposed to be added to the seven existing classes in the Stuttgart Realschool, in which the principal branches taught should be mathematics, technology, technical mechanics, and technical chemistry. Subordinate branches of instruction were to be instituted, consisting of bookkeeping, science of art, history of art, &c.

Two head masters were to be appointed. On the 29th of March the King gave his sanction to the new undertaking, and the trial lectures of the candidates for the newly-formed classes took place on the 2d of May. On the 15th of May the private docent in Tübingen, Dr. Heigelin, was appointed for the branches of descriptive geometry, constructive technology, history of art, criticism on art, &c., and Dr. Degen, of Stuttgart, was appointed for the branches of general and technical chemistry, general instruction in engineering, knowledge of merchandise, &c. At the same time a committee was appointed whose duty it was to supervise the new institution. The committee was called "school council," and consisted of the rector of the realschool, the director of the school of art, three masters of the institution, two counsellors of state for the central seat of the agricultural society, and two counsellors of state for the central seat of the society for commerce. The school opened in October of the year 1829, and occupied a building in King street, erected in the year 1807, by King Friedrich, for the officers of the guard, and hence it was called "the officers' pavillion." The success of the school was so marked that in the year 1832 a new organization was requisite.

The institution at this time asserted its independence by separating, in a measure, from the realschool, and establishing itself as a "Mechanics' Institution," with three annual terms. The number of head teachers was increased to 6—one for pure mathematics; one for mechanics and engineering; one for physics and chemistry; one for descriptive geometry and building; one for architecture, and one for plastic art and ornamentation.

In the first term all the pupils had to attend every class. In the second and third terms the pupils were allowed to choose the branches of study, according to their future calling. For the examination of the first term a knowledge of the German language and of arithmetic and geometry was required.

The pupils entered at the age of 14 and 15 years.

In 1852 the number of students had increased to 200, about a third of whom were architects.

Again plans were made for the enlargement of the institution. A higher grade of instruction was considered desirable for those who proposed to become architects, engineers and builders, and merchants. The whole plan of the institution was, therefore, revised in the year 1835-'36,

and the necessity of an extension of the school by the addition of a higher fourth course, and the introduction of other branches of instruction, as also by the appointment of additional teachers, was generally recognized. Means to carry out this extension were granted by the state; in the year 1838-'39 the necessary alterations in the building were made, and in January, 1840, the institution received the name of "Royal Polytechnic School."

There were at this time four terms. A student, to be admitted, was required to be at least 14½ years of age. The instruction of the first course or term was purely preparatory, and comprised arithmetic to the equations of the second degree, geometry and trigonometry, free-hand drawing, languages (German, French, and English), geography, history, and religion, and a full attendance by every regular pupil was required. The instruction in the three upper courses comprised mathematics and natural science, trigonometry, analytic and descriptive geometry, engineering, natural history, chemistry, and physics, in addition to the special technical studies of construction of buildings, building in general, machinery, building of streets, bridges, and aqueducts.

The number of lessons in the first division were fixed, for the time being, at 20; in the second division, at 7 to 11, according to the calling.

Four different professions or callings were recognized—the mechanic technical, the technical chemist, the profession of teaching, and commerce.

The staff of teachers was raised to six head professors of science, two of art, and a number of assistant and specific masters.

According to this arrangement, the theoretical education of the technologist was accomplished at the age of 18 years. If he commenced business life at this early age he could not possibly have obtained advancement enough for self-dependence, and would have felt himself imperfectly prepared and without necessary practical knowledge. It was not surprising, therefore, that complaints were made that the institution did not accomplish what was expected from it, and the wish was expressed that the age fixed for admittance should be raised. In consequence of these complaints, the first, or preparatory class, was abolished and the age of admittance fixed at 15 years. A preparatory class was added, as eighth or upper class, to the realschool, with two divisions, one reserved for preparation for the polytechnic school, and the other for the completion of the studies of those students who had no intention of entering the polytechnic.

This arrangement was to compensate for the lack of what did not then exist in Stuttgart—the upper realschool. In addition to this, the so-called winter students, consisting mostly of future artisans, were no longer admitted to the polytechnic school, a separate school—Mechanics' Institute—being provided for them in the year 1845. To the three remaining classes in the polytechnic school were then added two higher courses or classes, in which students studying architecture in all its branches were given, within the Kingdom of Württemberg, an opportunity of fitting themselves fully for the state examination.

This new organization commenced operations on the 3d of March, 1847. The principal difference in the plan of instruction consisted in the separation of the purely theoretical branches common to all polytechnic students from the branches of study requisite for special aims and callings. This separation was effected as follows: The purely theoretical branches were taught in the first two classes; the fourth and fifth classes were reserved for the students of special branches. The middle, third year formed a medium, when higher mechanics, practical

geometry, physics, chemistry, mineralogy, and geognosy, with the various branches of drawing requisite for diverse callings, such as drawings for buildings, machines, &c., were taught.

The staff of masters in the polytechnic school was then increased, first to 8, and in the year 1849 to 10 head-masters—3 for architecture, 2 for mathematics, 1 for physics, 1 for chemistry, 1 for natural history, 1 for construction of machinery, and 1 for engineering. For the same year the institution of repetents (under-masters) was introduced. The duty of such under-masters was to attend the different lectures and, at fixed hours, to give repetition of the same, partly in lecturing and partly in the form of examination to students who could not otherwise keep up with the class.

The revolution year, 1848, was productive of demands for fresh reforms. A number of polytechnic students seized the opportunity then presented for sending a petition direct to the ministry of the church and school department, from which the ministry for the home department had previously been separated, with a list of their grievances and projects of reform. These projects consisted in the perfecting of special schools for special branches, the separation of preparatory classes, which would be closed by an examination for matriculation, and a change in the order of examinations in architecture.

These so-called reforms have only to some extent been in practice since that time, but have now been fully recognized in the reorganization which has just taken place in the new departure, as the "Technical High School."

About the year 1856, much was said about the necessity of practical studies, and many plans for the attainment of the same were suggested. Among others, the plan of preparing work-rooms inside the building was proposed and adopted. It was also suggested that the morning hours should be devoted to study and the afternoon hours to practice in the work-rooms.

During the vacation, the work-rooms were open to all students who wished to make use of them, and the middle year of the whole course was to be devoted to practical study. These arrangements, however, did not work satisfactorily, and the year of practical study was given up. The teachers became convinced that an interruption in the course of study was not advisable, and the attendance in the work-rooms, therefore, became sparse, and, during the vacation, wholly ceased. In the prospectus it is still mentioned that the opportunity is given for practical labor in the work-rooms, but no one is inclined to make practical work a condition for further study.

The endeavor of the direction of the school, to promote a practical tendency in the course of instruction, was very successful.

When the institution became a polytechnic school, a council was placed at the head of it in which the teachers of the school constituted a majority. It was a long time before the opinion was universally adopted that the school could flourish only by becoming independent and relying upon a government of its own creation. As this opinion gained ground the following changes were suggested: Separation of preparatory from special studies, and different buildings for both; classical studies, as a rule, for preparation for the higher technical studies; the technical preparatory school was to be the realgymnasium without Greek, and placed on a level with the upper gymnasium. At its close there were to be matriculation examinations, and two or three years were to be devoted to practice, and then admittance to the technical academy; the realschools were to cease to be the preparatory schools for

the polytechnic; and the polytechnic was to be directed by a company, composed of the head professors, and by a president, chosen periodically from their midst, to be called "rector" or "director."

After many arguments in favor of and against these propositions, they were declared impracticable.

It was objected, and with good reason, that the complete separation of the schools would be attended with much difficulty and expense; that the valuable collections could not be doubled and the number of professors raised at the rate required; that no polytechnic institution had limited itself to exclusive instruction in special branches; and that, finally, both schools should co-operate, and, at the same time, constitute a sort of check upon each other in going to extremes, and from becoming too practical. There was evidently no thought at that time of making the polytechnic a high school from which the preparatory school was to be completely separated.

The school committee proposed to appoint a principal for the polytechnic who was not, at the same time, professor, and who should be assisted and controlled by a school committee in which the referee of the board of education should be member ex officio. The analogy of the university, with regard to change of principal, did not, it was said, hold good for the polytechnic.

There, competition formed a part among the professors; here, that was not the case, the end and aim of the instruction being entirely different. In the polytechnic school a firmer control was requisite over teachers as well as students. These views led to the polytechnic school being placed under the control of the board of trade. The board of education, however, strongly opposed this proceeding, asserting that the scientific character of the polytechnic school ought to be maintained at any cost, and that the importance which the board of trade gave to the personal influence of the director over the school was totally wrong in principle; that, in short, the polytechnic was not likely to submit long to a bureaucratic rule which represented only individual views.

After lengthened discussions, the president of the board of trade was, in 1860, nominated extraordinary member of the board of education, with the right of taking part in the supervision of such educational institutions as were connected chiefly with commercial life, and especially with the Polytechnic School and Mechanics' Institute. Circumstances occurred, however, which rendered necessary a new organization as early as the year 1862. In February of this year a plan was submitted to the ministry, in which it was proposed that the Polytechnic School should be divided into two grand divisions—a lower and an upper division; the lower with three classes, and the upper with four sections, architecture, engineering, construction of machinery, and chemical technics. Each class of the lower and each section of the upper division were to have a special, periodically chosen principal. The whole institution was to be placed directly under the ministry of public instruction, and directed by a permanent rector, who was to be assisted by a subordinate committee, consisting of the principals of the four sections and one of the principals of the three classes, together with the teachers' committee, which was composed of the whole staff of teachers and professors.

This plan was modified as follows: The lower or mathematical division was to consist of but two classes, with a permanent rector at the head. The upper or technical division was to consist of the four above-mentioned sections, which were to be governed by a director chosen

annually. This organization received the sanction of the King April 16, 1862.

The technologist now began his regular education with the eight classes of the realschool. At 16 years of age, after an examination, he was admitted to the mathematical division of the polytechnic, in which the whole of the higher mathematics, with theoretical mechanics and the natural sciences, botany, and zoölogy were completed. After the completion of the studies of this division, the technical matriculation examinations could be made, which, if passed, gave the right to a shorter military service, and to the reception of scholarships, but was not a *sine qua non* for entrance to the technical division. In the technical division three years was the time generally required, so that study was completed at the age of 21 years. The number of professors who formed the committee was, at this period, 20, with 24 other teachers and assistants. In this manner the polytechnic school retained in its organization its preparatory school, and the wish of the teachers' convent or committee was fulfilled. But it was not long before the conflicting influences consequent thereupon became apparent in complaints and alleged grievances.

The sections for engineering and construction of buildings expressed their dissatisfaction with the results achieved by the mathematical division. They maintained that the students entering the technical division were imperfectly prepared; that only a small proportion of the students of the mathematical division graduated; that, with respect to mathematics, too much was required. A good deal was said on both sides, until finally a prevailing opinion existed that the separation of the preparatory schools from the technical school was, after all, the natural solution of the problem.

The first step toward the extension of the technical division and ultimate separation of the preparatory school was taken July 18, 1870, by the addition of two new special classes—a mathematic-natural-historical class, and a class for general instruction.

By this arrangement it was possible to rank each professor—there were now 20—in a special or professional branch or class, and from professional school, or class boards, which could strengthen themselves still further with assistant teachers, who, by discussing all points connected with their special classes beforehand, would simplify the deliberations of the committee and teachers' convent, and help them to reach their conclusions in a more direct and satisfactory manner. The study of mathematics would then also be placed on a par with the study of technics, and the mathematical division would be considered as entirely preparatory.

The higher mathematical studies, particularly special branches, could also be apportioned to the mathematic-natural-historical division, without fear of overburdening the mathematical division or of lowering the standard of technical studies.

From this time each professional class chose its own principal (formerly appointed by the teachers' convent), and the principals of the professional classes being members of the general committee, each class or school had the power of speaking for its own interests. It was at the same time, established as a fixed rule that an ordinary student could only be admitted into a professional class after having graduated.

This matriculation examination was soon after made a condition of admittance to examination for state offices. Examinations for diplomas were also introduced in the various professional classes, in order to give

students, at the close of their studies, an opportunity of proving the amount of knowledge attained.

Up to this date these examinations had been made principally by non-Württembergians (they not being admitted to the state examinations), and by those attending the class for construction of machinery, as state examination in this branch had not yet been provided for.

The last step necessary to raise the polytechnic to a technical high school—the separation of the mathematical division—was considerably simplified, in the course of the next few years, by the extension, in 1871, of the former technical division of the gymnasium (Latin or classical school) to ten classes, and the Stuttgart real (technical) school, in 1873, to 9 classes. The real-gymnasium (technic classic) proved itself perfectly capable, with its ten classes, of fully preparing for the technical division, with the exception of mechanics, and as that could well form a part of the polytechnic programme, nothing prevented the pupil of the real-gymnasium from entering the technical division after having passed his examination. It was then clear that the upper realschools, if allowed two more classes, would have the same right.

In 1874 the ways and means to the separation of the mathematical division were discussed under the presidency of his excellency the minister of church and schools, on which occasion it was determined that in the autumn of 1875 the 10th class of the upper real school should be opened, and class I of the mathematical division should cease, and that in the autumn of 1876 class II should also cease.

The change projected with regard to examinations was also effected. In the place of the technical matriculation examination, the examination at the close of the real-gymnasium was made the condition of admittance. The architects declared themselves satisfied with the degree of mathematical and natural historical knowledge required at such closing examination.

In the first state examination in building, chemistry and geognosy were not required of the candidates for architecture, so that henceforth only branches connected with actual practice (not merely theoretical subjects) are to be treated; engineers, however, require of their candidates a higher degree of knowledge in mathematics and natural sciences. In this branch the candidate generally must, in two years' time from his entrance into the polytechnic, pass a second and special examination, in which he is required to give proof of a higher mathematic-natural-scientific knowledge. To this end a preparatory examination is held at the close of each school year, to which ordinary students only have access, and in which students are examined in higher analysis, mechanics, and relative descriptive geometry, physics, chemistry, and geognosy. The passing of this examination is a condition of admittance to the first state examination of candidates for the engineering branch.

In the year 1876 the present new organization of the Polytechnic Institute received the sanction of His Majesty the King of Württemberg, and was entered upon without delay.

The course of the technologist in this institution is now as follows: The preparatory schools are the real-gymnasium and the 10-class real institutions of the country, and graduates of these institutions are entitled to admittance to the polytechnic as ordinary students. The graduates of the classical gymnasium are entitled to admittance to the chemie, mathematic-natural-scientific, and general instruction branch classes, and also to admittance to the other branch classes after one year's satisfactory study in the same.

Admittance to the polytechnic takes place, usually, at the age of 18

years. The time of study is, for the technologist, from 3 to 3½ years. At the close of this term the state examination in building, for architects and engineers (to which only ordinary students are admitted), takes place. An examination for diplomas closes the course of study for the chemist and constructor of machines.

In the mathematic natural scientific and general instruction class, the students of all branches are given the opportunity of extending their knowledge. The candidate for the profession of teaching, especially, can, in this class, attend all branches requisite for his examinations as real teacher or technical professor. For the latter examination two years' study is usually sufficient.

I have thus followed the course of the polytechnic, or, to give it its new name, the Technical High School University, from its rise to the present day, and have shown how, beginning humbly, it struggled bravely and perseveringly for existence, and how, conquering all difficulties, among which not the least formidable were old customs and prejudices, it has created for itself a name and position which ranks among the highest institutions of learning in Germany. Its friends can look back with pride on what it has accomplished, and feel that they were fully justified in celebrating its first grand jubilee with pomp and splendor. There was an admirable display of refined taste and artistic fitness in the selection of festivities for the occasion. The ball was preceded by brilliant life pictures, whose living models, descending from the dais, danced in the rich and quaint costumes of a bygone age to an old-world melody. The torch-light procession, in which each corps, headed by picturesquely attired banner-bearers, was preceded by tastefully-arranged symbols of their particular branch of study or profession, and attracted general admiration.

The banquet was attended by students of yore, whose experience in the Polytechnic Institute dated fifty years back, and they, with students of all the intervening years, sat down with the professor and teacher of the modern day, and exchanged warm and heartfelt words of congratulation and fellowship.

This interesting and harmonious occasion was a fitting close to the first stage of the existence of this great institution, as well as a most appropriate augury for the continued harmony and prosperity of its future career.

#### STATISTICAL INFORMATION.

*Number of professors.*—The present number of professors and teachers in the Royal Technical High School University is as follows:

Head masters, or professors .....	26
Branch and assistant masters .....	19
Repetents, or masters for repetition .....	4
Assistants .....	5
Private docents .....	22
Total .....	76

*Number of students.*—The number of students for the winter term of 1878-'79 were 447. These were divided among the different branches of study as follows:

Architecture .....	126
Engineering .....	68
Construction of machinery .....	28
Chemical technics .....	58
Mathematics and natural science .....	86
General branches .....	13

During the summer term of the year 1879 the number of students was 379, divided among the different branches as follows:

Architecture .....	166
Engineering .....	52
Construction of machinery .....	29
Chemical technics .....	49
Mathematical .....	66
General branches .....	17
<b>Total .....</b>	<b>379</b>

*Attendance.*—The average attendance during the year 1878-'79, enumerated in the usual way, that is, attendance in the winter term with the addition of those who entered during the summer, was 486, divided as follows:

From the Kingdom of Württemberg .....	268
From other countries .....	218

Of the latter number the students came from the following countries:

From the several states belonging to German Empire .....	104
From other European states .....	97
From countries outside of Europe .....	17

<b>Total .....</b>	<b>218</b>
--------------------	------------

*Nationalities of students.*—The representation of nationalities in the institution stands thus:

From Switzerland .....	59
From Prussia .....	50
From Austria-Hungary .....	15
From Bavaria .....	15
From North America .....	13
From Baden .....	11
From Russia .....	11
From Hamburg .....	8
From Saxony .....	5
From Oldenburg .....	4
From England .....	4
From Italy .....	4
From Hesse .....	2
From Mecklenburg .....	2
From Braunschweig .....	1
From Alsace .....	1
From Renss .....	1
From Bulgaria .....	1
From France, 1; Norway, 1; Sweden, 1 .....	3
From Australia, 1; Asia Minor, 1 .....	2

The standing of these 486 students for the year 1878-'79 is recorded thus:

General or ordinary students .....	297
Extraordinary students .....	189
<b>Total .....</b>	<b>486</b>

*Age of students.*—The average age of all the students during the year 1878-'79 was 21 years and 5 months.

Students under 18 years of age .....	18
Students between 18 and 20 years of age .....	146
Students between 20 and 25 years of age .....	277
Students above 25 years of age .....	45

The largest number of students attending the institution in any one year occurred in 1872-'73, when the number reached 614.

The total number of students who have attended the school during



the fifty years of its existence, from the autumn of 1829 to the autumn of 1879, was 7,403.

The number of lectures given during the past year was, during the winter term, 110, and during each week 256 hourly lessons in lecture form, and 193 in practical form. This does not include studies in the laboratories.

During the winter term each student attended, on an average, 29 hourly lessons per week, and during the summer term 27 per week.

*Stipends.*—During the past year stipends were granted to 47 students, the funds being raised partly by the jubilee or anniversary dotation and partly by the dotation of Her Majesty the Queen, for study. Eighty-eight students studied during the year free of all charges.

*Prizes.*—Prizes were awarded as follows: In *architecture*, to a student from Frankfort, for the plan of a building in which large balls were to be given. In *engineering*, to a student in Stuttgart, for a plan for a canal between Cannstatt and Heilbronn. In *general branches*, to a student from Berne, Switzerland, for a work with the motto "In nova fert animus mutatas dicere formas." Also, to a student from Mengen, for a work with the motto "*Attempto*." Besides these prizes, a number of certificates of merit were awarded.

#### UNIVERSITY AND COLLEGE DEGREES IN UNITED STATES AND GERMANY.

An interesting feature in connection with the higher education in Germany is the esteem in which university honors are held by the people at large. This is especially striking to an American who is not accustomed to regard a man possessing a college diploma as having any merits or qualifications superior to those of the person who does not possess such a document.

If search is made for the cause of this difference in the opinions of the two peoples, it will be found to rest in the fact that in Germany a diploma has a certain well-determined value, while in America it has, at best, a very indefinite one. With the one it readily inspires confidence, and with the other it does not.

In Germany proper there are 21 universities, with 2,000 teachers and 21,000 students. These universities are all national, and, with the exception of a few learned societies, are the only institutions empowered to confer degrees. In this must be recognized the marked wisdom of the state; and just here, too, will be seen the reason for the greater worth of a German diploma.

In the development of the educational system of Germany the national soon obtained the supremacy over private schools, and this supremacy has been steadily maintained to the complete annihilation of the latter. The state looks upon the university as the only and absolutely necessary training-school for her future representative men, and provides for her own future existence by making these schools as thorough as possible. She also further declares that, before entering the university, the young man must undergo a fitting training. The nine years' course of the gymnasium is the usual preparation of the German student; and when this fact is considered, and also the amount of work he is required to perform before taking his degree, no one will be at a loss to understand why it is that the diploma of the university is the best possible introduction which the student can take with him when entering into active life. Indeed, not only is the diploma the best, but, in many cases, it is the only sufficient introduction to the world and society at large. Lawyers, doctors, pharmacists, and preachers have,

for many years, been required by the state to pass certain examinations before being allowed to enter upon the practice of their professions.

But, aside from this, there is another direction from which a diploma is quite as peremptory as from the state itself. I refer to manufacturers and others who employ skilled assistants. It is at this period nearly impossible for a young man to secure a position as analytical chemist in a manufactory or mill, or as civil engineer, until he has obtained "his papers" from the university or polytechnicum. Germany employs a large amount of skilled labor of this class, and were it not for the thoroughness of polytechnicum and university work the manufacturer would never be secure in engaging the services of an applicant who can show only his diploma. As it is, however, the employer has the utmost confidence in "college-bred" men and their diplomas, and experience shows that he is always safe in employing them.

When comparing the views held in Germany upon this subject with those prevailing in the United States, an American cannot apparently feel satisfied with the conclusion which naturally follows. The opinion seems to exist among many of our manufacturers, mill and mine owners, as well as among politicians, that thoroughly trained technologists in their respective trades are not wanted, and in cases where such are necessary there seems to be an aversion to employing young men simply on the recommendation of a college diploma.

An incident familiar to me will illustrate this. A few years ago, a young man whose brilliant professional acquirements had already given him fame in Europe and America, applied for the position of assayer to one of the mining companies in Southwestern Colorado, and his application was accompanied by a statement of his qualifications as a chemist. The answer he received several days later was short and to the point: "We have no use for you college fellows up here." Two reasons may be assigned for this indifference to the qualifications of students as practical technologists. In many cases manufacturers and mine-owners themselves have an inadequate idea of the application of science to industry, and do not properly appreciate the advantages of having in their employ trained assistants. On the other hand, there is that still larger class of manufacturers who, as is well known, are among the most intelligent of our citizens, and who would gladly make use of scientifically-trained assistants if they but knew whom they could trust. And precisely here is the difficulty, and that such difficulty should exist is one of the faults of our higher educational systems.

Perhaps we have too many academies and colleges with university privileges and pretensions, and perhaps, also, too many institutions which confer degrees for a minimum of knowledge on the part of the student. It seems to be the chief ambition of many of the colleges of the United States to graduate large classes, and in many cases "special inducements" are offered in the form of new courses and pleasant-sounding titles, which captures the student.

To a thoroughly educated European the list of titles sometimes conferred by an American college or university is simply amusing. There are bachelors of arts, science, philosophy, chemistry, civil engineering, and law; masters of arts and science; doctors of law, science, medicine, philosophy, and divinity, to say nothing of the many other degrees which our own generous Western schools are ready to bestow on special occasions.

The effect of all this is to render an American degree cheap and unesteemed at home, while it is held in contempt abroad. And why not?

For in such a multiplicity of titles and degrees it is impossible to determine which have real value and which have none at all.

To change this condition of things would seem to be one of the highest duties of our State governments. A certain amount of jurisdiction in the matter of arranging college courses and bestowing degrees is just as much a prerogative of a republican as of a monarchical state, and is certainly as great a duty.

The United States expends as much money for the higher education of its youth as does Germany, and should it not be one of its great aims to see that a correspondingly large amount of good is accomplished? This may be secured by following the German example of giving its higher educational institutions a thorough and strong support, and then requiring of the students the same honest hard work before taking a degree. It is, perhaps, neither possible nor proper for the State to interfere with the growth of private and sectarian schools, but it is possible, and not only proper, but absolutely necessary, that in the 360 "colleges and universities" of the United States there should be established a distinction between academy, college, and university that will be understood and faithfully observed.

So much is due to the young men of our country who, during college life, work hard and honestly to master a science and profession upon which their future prosperity and position in life is to depend. It is also due to the standing and character of the institution from which he graduates, so that the certificate or degree which it gives to the faithful student will have a meaning and value that will be his ever present and best friend when he enters into the struggles of active business life.

As a nation we need good civil servants, and as a manufacturing people trained technologists, in whose abilities those engaged in scientific and manufacturing pursuits can have a degree of confidence that is free from limitations and doubts.

To accomplish this, some legislation on the part of the States seems indispensable.

J. P. POTTER.

UNITED STATES CONSULATE,  
*Stuttgart, 1879,*

## NEW PRUSSIAN ORTHOGRAPHY.

*A report by Consul-General Lee, of Frankfort-on-the-Main.*

The German language being so extensively spoken by the people and taught in the schools of the United States, it seems to be proper to advise the Department, for its own information, and, perhaps, also for that of the National Bureau of Education, of measures lately taken by the royal Government of Prussia looking to the uniformity and improvement of the orthography of the language as written and spoken within the limits of that kingdom.

For the purpose of effecting this so-called improvement and making it universal, the ministry of public worship and instruction has prepared and issued a series of rules as to the proper method of spelling various words and classes of words. These rules have been published in the form of a small brochure, of which a copy is herewith inclosed, entitled "Regeln und Wörterverzeichnis für die Deutsche Rechtschreibung, zum Gebrauch in den Preussischen Schulen."

At an early date these rules will be adopted in all the schools of Prussia, the text-books of which will be made to conform thereto.

There is much discussion, and much difference of opinion, as to the propriety of this innovation and of the various changes it seeks to establish. Its object may be said to be threefold:

1st. To improve the Prussian orthography, by simplifying it where it is now deemed too complex and cumbersome;

2d. To establish uniform methods of spelling words which are now variously spelled; and,

3d. To secure if possible the same improvement and uniformity throughout the empire, thereby unifying the language of the various German States as their political institutions have been unified.

In Germany this is a work of peculiar difficulty; and it may be questioned whether more skill and resolution have been required for the establishment of one government for the German people than will be necessary for establishing one method in the use of the German language. In fact, of the two enterprises the latter is probably much the more difficult. There are almost as many dialects in Germany as there are different States, provinces, and neighborhoods. In this city, for example, there are singularities of expression known as the Frankfort dialect; and in Sachsenhausen, on the opposite side of the Main, there are other and different modes of speech peculiar to that place. So it is with other cities and districts all over the empire, the difference of dialect amounting sometimes almost to a difference of language.

The present movement towards uniformity and simplification of the German orthography is not without precedent. Over ten years ago systems of spelling were prescribed by the governments of Würtemberg and Hanover for those States. In 1879, the Bavarian Government authorized a similar set of rules for Bavaria; and in the same year, the Austrian Government adopted a set for that empire. Other States, such as Saxony, Baden, and Oldenburg, are not unlikely to follow suit.

But the systems of orthography thus authorized and established are by no means in accord; and it is yet an open question whether the attempted reforms will not introduce more confusion than they will abolish. In fact, the opinion is entertained by some of the best authorities on the subject that an inferior orthography which is generally accepted is to be preferred to an improved one which comparatively few people adopt.

An interesting discussion of the various attempts at spelling reform, showing some of the differences in the different systems of rules prescribed, is herewith inclosed, in English and German. It is taken from the *Leipsig Illustirte Zeitung*, of recent date.

ALFRED E. LEE.

UNITED STATES CONSULATE-GENERAL,  
*Frankfort-on-the-Main, March 8, 1880.*

---

#### GERMAN ORTHOGRAPHY.

[From the *Illustirte Zeitung* of February 28, 1880, translated by Consul-General Lee.]

One can no longer properly treat of the above title as such, since there now exist, officially, only Prussian, Bavarian, &c., orthography; but for the sake of brevity it may be permitted to retain it here.

Formerly, when speaking of German orthography, every true friend of the German mother-tongue experienced a slight shudder. One's conscience was not quite clear; one felt guilty of sinning against the mother-tongue. After having, as scrupulously

as possible, settled upon the orthography for one's own self to use, on one point and another, grounds for doubt would after all arise.

Linguists and others, to calm their consciences as it were, would, from time to time, publish the opinions they had formed concerning German orthography, and many of the propositions made by them seemed indeed worthy of acceptance.

The "historical" wave, as it might be called, was followed, in the deluge of orthographical literature, by a "phonetic" wave, and it evidently appeared advisable to deviate here and there from the orthography hitherto in vogue, to drop an "h" here, to substitute "s" for "ss" there; but one was always distressed by the uncertainty whether one would be in a position ("im stande" or "imstande") to vouch for the correctness of one's own adopted usage.

As a matter of fact almost any kind of orthography was allowable, and a teacher, for instance, was not authorized to give scholars bad marks when one scholar would write "indees," "thun," "Heimath," "Rudolph," "gieb," and the other "indee," "tun," "Heimat," "Rudolf," "gib," &c.

The dissatisfaction produced by this state of things was generally felt. A newspaper could not publish the articles of its several editors and contributors in their own private orthography; could not print in one column "Muth" and "gieng," and in the other "Mut" and "ging." In the schools, too, it was perplexing when in one book would be found "Gleicheniss" and in the other "Gleichnis." As a consequence newspaper, school, and other private orthographies sprung up. A Leipzig school orthography was established as long ago as in the fifties by school director Vogel and headmaster Klauwig, a most exemplary work, which even to-day determines the orthography in the schools of Leipzig.

Between 1860 and 1870 two government orthographies of Hanover and Württemberg appeared. In 1871 several Berlin school-men compiled a work, which, by permission of the educational authorities, was introduced into many Prussian schools, entitled "Rules and Vocabulary for German Orthography."

As such regulations were necessarily confined to limited circles, nothing was more natural than the wish that the, at last, politically-united Germany might also become united as to the correct manner of writing the mother-tongue. With high expectations, therefore, was hailed a conference called together in 1876 by the then minister of public worship, Herr Falk, composed of linguists, teachers, book-publishers, and printers; the since deceased Professor Raumer having worked out a plan for a general and common German orthography, and laid said plan before the conference for its consideration.

This assemblage unfortunately accomplished nothing more than to pass certain majority resolutions, which were in part contradictory of themselves, and were only capable of rendering the confusion still greater. It happened, then, that one, without regret, saw that come to nothing which had before been so jubilantly greeted.

One point was gained, however, from the fact that, by the universal attention paid to the conclusions of this conference, larger circles had become convinced that neither the historical nor the "phonetic" principle could be rigorously carried out in laying down rules for German orthography.

To carry out the historical principle would have imposed an unbearable burden upon those obliged to learn anew or over again. The phonetic principle had to be given up on account of the impossibility of fixing the so endlessly liquid pronunciation by means of casting it in the mold of a forcible and arbitrary decree.

The correctness of Raumer's proposition became generally evident that to fix upon a settled orthography for all time would be nothing less than doing violence to the life and developments of the language, and that the attempts now being made to accomplish such a codification should be made in no other direction than that in which the language through all the centuries of its development has voluntarily taken its course unaided and untrammelled by legal measures. As before, so also in the future, the further development of the orthography of the language must follow the process that is fixed and unchangeable in the pronunciation; should gradually and more and more be designated by phonetic characters; while etymology should be followed partly in the case of variable pronunciation, partly for the sake of clearness.

In the course above pointed out several steps have happily of late been taken, and it is only to be regretted that the same steps taken have been on different sides at the same time, and that the attainment of unity has perhaps for this very reason been again indefinitely postponed.

The publishing-house of Breitkopf and Haertel, in Leipzig, had the linguist, Professor Sanders, work out a schedule for the regulation of orthography, which was soon adopted by numerous publishing-houses and printing establishments of high repute.

A petition by the above-named publishing-house to the effect that the Prussian ministry of public worship might lend its sanction to these rules failed of its purpose; but on the other hand the prospect was held out that a codification would be made and promulgated on the part of the State.

Hopes in this direction, however, soon became clouded when towards the end of

1879 the Bavarian Government published a small book entitled, "Rules and Vocabulary for German Orthography," and issued a decree directing that all schools and school books in Bavaria should conform to the orthography therein prescribed. Under the very same title and in the same year the Austrian Government had issued a similar book; the former ordinance of the Württemberg Government was still in force, and now a Prussian ordinance in the same direction was to be expected. Such an ordinance has now in 1880 made its appearance in connection with a pamphlet under the same title as that of the Bavarian Government, and who can assert that ordinances by Saxony, Baden, Oldenburg, &c., will not soon follow?

All the decrees which have hitherto been promulgated have been based upon Rammner's plan, and this fact will certainly be hailed with pleasure by the great majority of the German people, as well as by the editors of the *Illustrirte Zeitung*, in whose office the orthography of the "Rules and Vocabulary" had for the most part already been in general use. Like the editors of the *Illustrirte Zeitung*, many other editors, book-publishers, and printers would surely have been willing to drop certain peculiarities and conform to the general way of spelling if only a general ordinance for all Germany had been promulgated.

In spite of all similarity there now exists in the German orthography governmental peculiarities, and publishers of books which are not specially designated for use in the schools of a particular State will, by the ordinances which have been issued, only be brought into great embarrassments.

Books, such as Daniel's "Geographischer Leitfaden," Lüben's "Deutsches Lesebuch," and many others, which have been introduced into the schools of all German-speaking countries, ought now properly to appear in special Prussian, Bavarian, Austrian, &c., editions, and we only express to the publishers the wish that they may not still be compelled to issue editions in the Saxon, Baden, &c., orthography.

A few examples may serve to show how, in connection with all fundamental similarity, many differences in the official rules and vocabularies exist:

Prussian.	Bavarian.	Austrian.
du giebst.	du gibst.	du giebst.
Sellerie.	Lelleri.	Lellerie.
Sergeant.	Sergent.	Sergeant.
Matratze.	Matraze.	Matratze.
Hellebarde.	Hellebarte.	Hellebarte.
Betttuch.	Bettuch.	Bettuch.
Atem, Kran.	Ath, Krahn.	
Froundnat, geratin.	Frohnd, gerath.	

As to dropping the "lengthening h," Prussia and Bavaria are of one accord, while Austria has retained many more of such lengthening characters. Prussian and Bavarian "Mut," "Tier," "Teil," "Urteil," "teuer," "Eigenthum," "Wut," "Turn," &c., are written in Austria, "Muth," "Thier," "Theil," "Urtheil," "thener," "Eigenthum," "Wuth," "Thurm," &c.

One would be in the wrong, however, were one to conclude from this that in Prussia and Bavaria the "th" is everywhere done away with. It still remains in "Thal," "Thon," "Thar," "Thran," "Throne," "Thron," "thum," "That," "Unterthan," "Thur." One sees that the school children have not been spared learning exceptions to the rules.

It is worthy of remark, too, that in the Prussian vocabulary dual forms are in many cases allowed. While in Bavaria "Preiselbeere" and "Profos" are prescribed, the Prussian schedule allows besides these forms, "Preisselbeere" and "Profoss."

Explicit rules are also wanting in the Prussian schedule in regard to three consonants standing together. While one must write "dennoch," "Mittag," "Breunessel," "Schiffahrt," "Schwammelster," "Bettuch," &c., are also allowed to stand.

Bavaria and Austria are consistent in dropping the third consonant. A similar relation occurs with the three vowels in "Seenen," "Feeen," "Armeen," &c., which are retained in Prussia but discarded in Bavaria. But singularly enough, both Prussia and Bavaria require "Roheit," "Hoheit," &c., and in these cases drop the one of only two consonants.

In all these ordinances the manner of spelling the termination, "ieren" is consistently carried out. On this last point we are of the same opinion as the Berlin Post, which in an article on the Prussian Rule Book, says: "One's linguistic delicacy of feeling resists the attempt to furnish foreign words, which still stand on the list as outlawed, with certificates of German citizenship by means of this 'e.'"

In this respect we, too, do not follow the rule book. We do not write "naturalisieren," but "naturalisiren," and think that some day everybody will write "einbürgen."

As to the characters for the "s" sounds, about which there has been so much controversy, Prussia and Bavaria agree even as to the rule (not very agreeable for us) that in Latin characters "ss" is to be substituted for "sz." In the division of syllables

bles Bavaria is consistent in dividing the syllables according to their pronunciation. Prussia does so only "in general" combinations, such as "st," "pf," "sp," &c., which in Bavaria are never separated, are in Prussia separated thus: "Las-ten," "Knos-pe," "Klop-fen," "Krat-zen"; but after "r" the "pf" is not to be separated, thus leaving "Kar-pfen," side by side with "Klop-fen." In this regard, too, we can only see a useless burden imposed upon learners.

An innovation extending beyond the limits of orthography is contained in the prescription of the Prussian Rule Book, that the superlatives of adjectives ending in "isch" are not to be formed with "st," but only with "t"; thus, for example, "der narrischste" instead of "der narrischste." Why? we do not know.

With all the merits of the rule books hitherto issued, it is nevertheless to be regretted that the several governments have not also accepted that opinion of Raumer as expressed by him in the words: "Even a less good orthography, provided it be agreed upon and accepted by all Germany, is to be preferred to a more perfect one, if the latter remains confined to only a part of Germany, thereby giving rise to divisions which are by no means to be considered as indifferent and immaterial."

## SILK CULTURE IN GERMANY.

*A report, prepared by Consul-General Lee, of Frankfort-on-the-Main, in response to a request from the Department of Agriculture.*

UNITED STATES CONSULATE-GENERAL,  
Frankfort-on-the-Main, March 29, 1879.

Referring to the request for statistics in relation to the manufacture of silk, the breeding of silk-worms, and the culture of mulberry trees within the territory comprised by my jurisdiction, I have to report that there is great difficulty in obtaining information on this subject, for the reason, partly, that there is very little to obtain. I have made many inquiries, written and verbal, of persons supposed to be well informed in relation to these matters, but about the only fact elicited is, that various experiments in breeding silk-worms have been made in different parts of Germany, at different periods, and have uniformly failed. A very intelligent member of the largest firm of this city dealing in silks informs me that at the present time silk growing in Germany is carried on solely by amateurs, in an experimental way, and that it is of no importance at all. An attempt at raising silk-worms was made at Rudesheim, on the Rhine, some years ago, but produced no satisfactory results.

The first silk-worms seem to have been brought to Germany in the year 1599. The first association for silk growing was formed in 1670, in Bavaria. During the reign of Frederic II this industry flourished somewhat at Mark, near Halberstadt, at Magdeburg, and in Pomerania, but it never obtained any firm footing, and decayed during the wars with Napoleon I.

More recently further experiments were tried, but with very little success. During the fifth decade of the present century a disease prevailed among silk-worms throughout Europe, causing a decrease in the production of silk of more than one-half.

At present silk culture is carried on mainly in Italy, Spain, Portugal, Greece, Turkey, France, Southern Tyrol, Southern Russia, and in Switzerland.

During the year 1874 the production (stated in kilograms) was as follows: Italy, 2,860,000; France, 731,000; Spain, 140,000; European Turkey, 369,000; Greece, 13,000; Asiatic Turkey, 170,000; Georgia, Persia, and Khorassan, 400,000. The export during the same year was, from China, 3,680,000; Japan, 550,000; Calcutta, 425,000 kilograms.

Among the standard authorities on silk-growing I may respectfully refer you to the following:

Essai sur l'histoire de la sericiculture, Paris, 1860, by Quatrefages.

Duseigneur-Kleiber: Le coton de soie, 1875.

Clugnet: Geographie de soie; étude géographique et statistique. Lyons et Basel, 1873.

Pasteur: Etudes sur les maladies de vers à soie. Paris, 1871.

Reichenbach: Ueber Seidenraupenzucht und die Cultur des Maulbeer-Bäumen. München, 1869.

In the tenth century silk weaving was carried on at Mayence, and soon afterward a very important silk industry rose at Augsburg, Nuremberg, and other places. In 1580 there were many silk factories at Berlin.

At present the manufacture of silk and half-silk goods is mainly carried on in the Rhenish provinces of Prussia. Out of 330 factories of these articles, there are in the district of Crefeld, 130; in the district of the chamber of commerce of M. Gladbach, including the towns of Gladbach, Viersen, Lobberich, Dülken, Rheidt, Odenkirchen, and Süchteln, 45; at Elberfeld, Barmen, Langenburg, and Ronsdorf, 102; at Cologne and Mülheim, 11. Silk goods are also manufactured at Aix-la-Chapelle, Hilden, Remscheid, Wermelskirchen, and Wettmann. Also at Bielefeld, Brandenburg, Berlin, Gutersloh, Lössnitz, Pirna, Potsdam, Stuttgart, and Zerbst.

Worthy of special mention are the silk goods of Crefeld, Elberfeld, Langenberg, Bielefeld, and Brandenburg; the half-silk goods of Crefeld, Elberfeld, Barmen, Langenburg, and Rheidt; the velvet goods of Crefeld, Viersen, Dülken, Süchteln, Rheidt, and Mülheim; the velvet ribbons of Crefeld, Viersen, Dülken, Lobberich, and Mülheim; the silk and half-silk ribbons of Crefeld, Mülheim, Barmen, Barsdorf, Langenberg, and Wermelskrehen; the printed silks manufactured at Hilden, and the passément and furniture goods of Crefeld, Elberfeld, and Munich.

In the year 1843-'44 the total consumption of raw silk in Germany amounted to about 350,000 kilos, valued at 26,400,000 reichsmark. Of this amount the factories of Rhenish Prussia consumed about 300,000 kilos. In 1871-'72 the consumption rose to 980,000 kilos, valued at 82,500,000 reichsmark, of which amount the factories of Rhenish Prussia consumed 860,000 kilos. At the same time the consumption at Lyons, the main seat of the French silk industry, amounted to about 1,290,000 kilos.

The silk and half-silk goods of Germany are sold mostly in Germany, England, North America, France, Austria, and Russia. This value may be fairly estimated at 151,800,000 reichsmark.

In addition to my own investigations, I have asked the various consuls subordinate to this office to make inquiries in obedience to your request, and their responses may be epitomized as follows:

The consul at Cologne writes:

I have made inquiries in regard to silk culture in my consular district, and find that that industry does not flourish in the Rhine province; in fact, that the culture of silk is not one of the industries in this locality. There is a velvet-factory in my consular district, the raw silk for which comes from Spain and Italy.

The consul at Mannheim writes:

That with the exception of a small private establishment or school at Ronfach, in Alsace, mentioned below, I cannot learn of any extent of culture of mulberry trees or silk-worms in Baden, Alsace-Lorraine, or the Pfalz. I find that silk is manufactured in considerable quantities in Baden and Alsace and Lorraine. Reports from different towns where the manufactories are situated are as follows:

In Baden.—At Freiburg in Baden, formerly the mulberry tree was cultivated for breeding purposes in the neighborhood of the city, but the cultivation proving unprofitable it has been discontinued; yet the manufacture of sewing-silk is there a speciality in the city; some 400 persons are employed and about that number addi-



tional in the city district. There are also in the vicinity a few silk weavers who weave ribbons and other silk goods.

*At Sackingen.*—It is stated that on account of the severity of the climate there are no mulberry trees or culture of silk-worms in the district, although the manufacture of silk is carried on to a large extent, the specialty being plain ribbons of silk, half silk, and floret silk, also some fashionable ribbons, the raw material being imported in the form of frame, organzine, and grège; the twisting of the grège into frame or organzine having been done in Switzerland and Italy. There are two manufactories at Sackingen; there are employed in one 1,800 persons on 800 looms, 517 of which are in the factory buildings, and 283 in surrounding places with the peasants. In the other, 900 persons on 400 looms.

*Alsace.*—At Ronfach in the vicinity of a large agricultural school an establishment exists which had its origin at Ottmarsheim, its purpose being the encouragement of the growth of the mulberry and the cultivation of silk-worms in Alsace; it has distributed about 25,000 trees and somewhat increased the culture of silk-worms.

*At Obersulz,* in Alsace, there is no cultivation of trees nor manufacture of silk goods; there are two disused manufactories of silk ribbons containing 130 looms which, when in operation, employ about 250 persons.

*At Thann,* in Alsace, there are two factories of about 50 looms each, employing each 75 persons, mostly women, in the manufacture of taffetas, failles, serges, and satins, also a manufactory of floret silk. Five years since the trade was much larger and more lucrative than at present; the reduction in number of looms and people employed is now about one-half.

*At Guebwiller,* in Alsace, the principal manufacturers, Messrs. de Berg Merian & Fils, write: "We employ about 900 persons on 250 to 300 looms; our specialty is the manufacture of plain ribbons of silk, floret silk, and silk mixed with cotton. Our industry is in a very depressed state; thanks to the rapid manufacture of our goods and the extraordinary cheap prices of floret ribbons mostly required in the United States, our importation is an important one. Regarding the cultivation of mulberry trees, we never believed it could yield a profit in Alsace in competition with the warmer climate and cheaper labor of Southern France, Italy, and China."

*Sarreguemines, Lorraine.*—There is no culture of mulberry trees in this vicinity nor manufacture of silk goods except silk plushes for men's hats, which is here a specialty, employing 150 men on double mechanical looms manufacturing two pieces, and 670 men on single looms manufacturing only one piece; others are employed spooling and warping the silk and finishing the woven pieces.

*Püttlingen and Zweibrücken* employ 350 men in the manufacture of the same specialty, silk plush for hats.

I find no public documents or statistics published on this subject except the report of the establishment at Ottmarsheim, dated 1875, and herewith inclosed.

### The consul at Munich writes:

Although the Bavarian Government, as well as private individuals, have given large sums for the furtherance of the silk culture in Bavaria, the same has not, in the least, been successful. The climate of the greater part of Bavaria is not propitious to the development of this branch of industry, and this, though not the sole, is the principal cause of the failure of all attempts to make silk culture remunerative. In the year 1872 (the only year I am able to obtain any account of) only 61½ pounds of cocoons were raised in Bavaria.

An association of ladies was formed in 1847, which had for its object the extension of this branch of industry. Numerous plantations of mulberry trees were made, but it was impossible to keep them up. At the present moment the only plantation existing is a very small one in this city, and the quantity of silk produced is so small as not even to be noticed in any statistical works published by the government.

I have applied both at the royal statistical bureau of Bavaria and at various publishers for works upon this subject, but am informed that none such exist.

### The consul at Nuremberg writes:

There is no manufactory of silk or culture of mulberry trees within the limits of this consulate, and I am informed there never has been, owing to the natural impediments, such as climate, &c. I know of no such industry in Bavaria. The silk manufacture in Zurich, in Switzerland, has reached large proportions, but, I understand, the raw silk is all imported from Italy and other countries.

### The consul at Sonneberg writes:

In reply to your communication of the 24th instant, requiring information for the Agricultural Bureau at Washington, as to the manufacture of silk and the cultivation of mulberry trees within this consular district, I have to say that no enterprises of this kind have ever been attempted in this mountainous part of Germany. Neither climate nor soil are adapted to the industry. I hear, moreover, that all efforts to breed silk-worms on a large scale anywhere in Germany up to this time have invariably failed;

and that wherever the culture is prosecuted at all it is more with a view to amusement than profit.

There are, however, in various parts of Germany establishments for the production of the silk-worm eggs, which find a market in those countries where the disease has broken out among the worms. A lot of eggs (10 grams) is sold for 160 to 180 marks; these produce about 18,000 worms, which consume a total of 450 kilograms of mulberry leaves; the result in cocoons is 20 kilograms, from which are derived 2½ kilograms of raw and 380 to 500 grams of reeled silk. Europe is estimated to produce annually 277,000 hundredweight of silk, which is valued at 580,000,000 of francs. The mulberry tree thrives in the warmer regions of Germany, especially in the Rhine provinces.

The consul at Stuttgart writes :

The manufacture of silk, and the cultivation of the mulberry tree, within the kingdom of Württemberg, is so meager as not to be regarded as worthy of enumeration among the important industries of the state. The climate and soil are admirably adapted to a vigorous and healthy growth of the mulberry tree, and labor is cheap and abundant; but there seems to be little interest manifested in the culture of silk. No statistics as to the quantity and value of the silk manufactured in the kingdom appear to have been collected and preserved; and no documents, as far as I have been able to learn, have been issued, giving special information relating to silk manufacture and the cultivation of the mulberry in the district referred to in your letter.

Appended is a statement showing the places where silk is manufactured, the firms engaged in the business, the kinds of silk manufactured, and the number of persons employed in the various branches of industry connected with it. This is all the data I am able to obtain. From this you can readily judge of the importance of the industries connected with the manufacture of silk in the kingdom of Württemberg.

The consular agent at Mayence writes :

I have the honor to acknowledge receipt of your favors of 24th ultimo and 19th instant, requesting to be furnished with information with regard to the culture of mulberry trees, the manufacture of silk, &c., within the district of this consular agency, and in reply I beg to say that, according to reliable information I have obtained, there is no such culture nor manufacture carried on in this district, neither the climate of the country nor the inclination of its people, which mainly are agricultural, favoring such pursuits.

The reports of the consuls at Mannheim, Munich, and Stuttgart are herewith forwarded in full. I have also to forward the following printed documents relating to the same general subject:

Die Maulbeer-baumzucht und der Seidenbau vom Samenkorn bis zum Seidenfaden. Von C. H. Pathe.

Rapport sur l'établissement d'Ottmarsheim, par M. Charles Zundel.

Die Seide, deren Geschichte, industrielle Wichtigkeit und Erzeugung, &c., von Fiedler.

The two documents last named have been received with the report of the consul at Mannheim.

The total amount of silk, silk goods, velvets, ribbons, and braids exported to the United States during the calendar year 1878, from the territory comprised within the jurisdiction of this consulate-general, was, in value, \$532,459.85 gold.

I am, sir, your obedient servant,

ALFRED E. LEE,  
Consul-General.

*Statement showing approximately the extent of the silk industry in Württemberg.*

MANUFACTURERS OF SEWING-SILK.

Name of firm.	Place.	Number of workmen employed.
Stringer.....	Isny and Ertingen.....	220
Fischer.....	Aldlingen.....	About 50
Ammann & Boehringer.....	Bönnigheim.....	200

*Statement showing approximately the extent of the silk industry in Württemberg—Continued.*

**SPOOLING FACTORIES.**

Name of firm.	Place.	Number of workmen employed.
Von Wunster .....	Andelfingen .....	100
Peyer & Meyer, of Augsburg .....	Branch in Mössingen .....	About 40
Carl Metz & Sohn .....	Freudenstadt .....	95
C. C. Eglehaaf & Sohn .....	Aalen .....	55
H. Weiss .....	Langenargen .....	100
Hoeck & Larosche .....	Winterlingen .....	230
Fischer & Walter .....	Wiesenthal .....	60

**WEAVING FACTORIES.**

Hits & Sons .....	Waiblingen .....	About 60
Sachs .....	Sindelfingen .....	65
Gaupp .....	Sindelfingen .....	10
Geseler .....	Tettmang .....	15 looms, formerly 30.

The total number of hands employed in the silk industry in the kingdom of Wurtemberg approximates: In the manufacture of sewing-silk, 470; in the spooling of silk for weaving, 680; in weaving, 150; making a total number of 1,300, more than one-half of which are children.

STUTTGART, *March 5, 1879.*

**ENGLAND.**

**THE IRON INDUSTRY OF THE NORTH OF ENGLAND.**

*Report by Consul Jones, of Newcastle-upon-Tyne.*

For upward of twenty years, commencing with 1853, the Cleveland iron district enjoyed an era of prosperity unparalleled in the history of the iron trade of this country. During that period the producing power of the district was many times multiplied. Private firms amassed great wealth. Many of these were turned into companies which for a time yielded handsome dividends to the shareholders, but which finally landed in bankruptcy and ruin.

The tide of adversity set in about the year 1874. Two years later—1876—the country was startled by the repeated announcements of great failures which shook the credit of the Cleveland district. The North Yorkshire Iron Company, with a capital of £30,000, and the West Hartlepool Iron Company, with a capital of £300,000, led the way. Then followed the failures of Messrs. R. Dixon & Co., of Middlesborough, with unsecured liabilities estimated at £100,000; of Thomas Vaughn & Co., with liabilities of about a million sterling; of Swan, Coates & Co., the Lackenby Iron Company; Messrs. Charlton, the Britannia Iron Company; the South Cleveland Iron Company; and the Stockton Rail Mill Company; bringing up the total nominal losses, up to the end of 1876, to about two and a half millions sterling.

In 1877 the suspension of Anthony Harris & Co., with liabilities of £40,000, was announced. Then came the failure of Mr. Thomas Greener, with liabilities of £37,000. The Liverston Ironstone Company soon followed. In 1878, the suspensions in the local iron and allied trades were few and unimportant. But the black list of 1879 is already heavily filled with such heavy failures as Lloyd & Co., Hopkins, Gilkes & Co.,

and the Skerne Iron Company, following that of the Rosedale and Ferryhill Company.

There are 165 blast furnaces in the north of England. Sixty of these are, or were, owned by the firms enumerated in the foregoing black list. And the producing power of the district in pig iron has been lessened by over one-third. There are 2,100 puddling furnaces connected with the manufactured-iron trade of this district. Six hundred—over one-fourth—of them belonged to the firms that have collapsed within the last three years and a half. It is noteworthy that the works which provided iron rails, and those that supplied them with pig, constituted the bulk of the failures. The Skerne was a plate manufacturing company; it is one of the exceptions to the rule.

Special local causes have contributed to the failure of a few firms; but the extreme dullness of trade; the falling off in demand; the consequent increase of stock produced at too great a cost; the low and ever-declining prices; and last, probably most important, the substitution of steel for iron in the manufacture of rails, were the causes which brought ruin to so many firms in the north of England. During the prosperous times, nearly half a million tons of pig-iron were used in the manufacture of iron rails. Less than 20,000 tons per annum would be a high estimate of what are now used in that trade.

The following is a table of the works which have been closed, or are in liquidation, in the northeastern district:

List of works.	Blast furnaces.	Puddling furnaces.
<b>MIDDLESBOROUGH.</b>		
Lloyd & Co .....	9	.....
Hopkins, Gilkes & Co .....	4	80
Cargo Fleet .....	5	.....
Britannia Iron Company .....	.....	120
Eriamus Iron Company .....	.....	50
<b>ESTON.</b>		
Eston Grange Iron Company .....	.....	6
Thomas Vaughan & Co .....	14	.....
<b>STOCKTON AND NORTON.</b>		
Stockton Iron Furnace Company .....	3	.....
Norton Iron Company .....	6	.....
Stockton Rail Mill Company .....	.....	70
Richmond (Jacques) .....	.....	15
North Yorkshire Iron Company .....	.....	58
<b>WEST HARTLEPOOL.</b>		
West Hartlepool Iron Company .....	3	112
Stranton Steel Works .....	.....	26
<b>FERRYHILL.</b>		
Rosedale and Ferryhill Company .....	10	.....
<b>DARLINGTON.</b>		
South Durham Iron Company .....	8	.....
Skerne Iron Company .....	.....	66
Whessoe Iron Works .....	.....	36
<b>GLAISDALE.</b>		
South Cleveland Iron Works .....	3	.....
<b>Total .....</b>	<b>60</b>	<b>639</b>

The chief statistics in regard to the manufactured-iron trade of the north of England are those of its board of arbitration; and it may be

added that that board represented about seven-eighths of the whole down to last year. Nearly every rail-mill was included; one or two important plate-mills (such as that of Fox, Head & Co.) were omitted. The following table shows the quantity of rails and plates produced in the years named:

Years.	Rails. Plates.	
	Tons.	Tons.
1873 .....	324,000	165,000
1874 .....	265,000	178,000
1875 .....	246,000	173,000
1876 .....	107,000	172,000
1877 .....	38,000	214,000
1878 .....	21,000	233,000

While the iron rail trade has fallen off from 324,000 tons in 1873 to 21,000 tons in 1878 the plate trade has largely increased—from 165,000 tons to 233,000 tons in the same period. In 1873 iron rails formed nearly 52 per cent. of the manufacture of iron made by the associated makers in the north of England, whereas in the present year iron rails form only 2.23 per cent. of the smaller total; while plates which in 1873 formed 27 per cent. of the total now form nearly 58 per cent.

If the recently discovered process for converting Cleveland ore into steel should fail in accomplishing that which is claimed for it, the district will be more dependent than ever upon foreign and outside home demand for pig-iron. But inasmuch as Cleveland can produce pig cheaper perhaps than any other country or home districts, and assuming that the progress in the cheap manufacture of steel shall be gradual, it is reasonable to expect a long lease of prosperity for the district. It is estimated that it costs £3 4s. per ton to produce pig-iron in the United States; the cost of production in the Cleveland district is less than half that amount. Large quantities of pig-iron are shipped from this district to Scotland, Germany, Holland, France, Belgium, and Wales—Scotland being the greatest importer. Some of the works of this extensive district are more advantageously situated for the export trade than others. The furnaces farthest removed from navigable waters are unable to work at a profit when prices are low. This fact will be readily appreciated when it is known that in the single item of carriage the difference in some instances is from 4s. 9d. to 15s. per ton in conveying pig-iron from the furnaces to the port of shipment. The extent to which Cleveland depends upon outside trade may be seen by the following table:

CLEVELAND PIG-IRON.

	1873.	1875.	1877.	1878.
	Tons.	Tons.	Tons.	Tons.
Quantity produced .....	1,998,421	2,047,673	2,124,831	2,023,000
Quantity exported over sea and coastwise .....	579,642	664,000	822,000	800,000
Quantity in stock .....	80,328	74,258	304,797	334,000

No account is taken in the foregoing statement of the quantity of pig-iron shipped by rail to various parts of the country. If the figures for iron so sent were added it would be seen that considerably more than half of the iron produced in Cleveland goes elsewhere to be manufactured. Until recently Cleveland devoted attention chiefly to the production of malleable iron; but it is now increasing its foundries and at-

tempting to produce finer castings than hitherto, whilst a range of minor but important iron-using industries are growing. In the brisk years of 1872-'74, it did not pay to use high-priced pig-iron for foundry purposes, but now the contrary is the case, and there is a development of the foundry trade, whilst the the rolling-mills are far from fully employed. Indeed, so far as the production of malleable iron is concerned, the most reliable judges believe that it is a decaying industry as a whole. That belief is expressed in the recent inaugural address of the president of the iron and steel institute, who said:

The day is at hand when either by the Bessemer converter, or by the open hearth, or by some other steel-making apparatus, there will be produced with absolute certainty, with comparatively light labor, every kind, variation, and quality of the metal iron which we now designate steel and wrought-iron.

At present the ore converted into steel in this district is imported from Spain and elsewhere. If Cleveland ore can be so converted a grand impetus will be given to the trade of the north of England.

Steel has superseded iron, not only for the manufacture of rails, but for railway tires, and boilers also. And the new metal is taking rapid strides towards supplanting the old in-ship-plates as well. The superiority of steel plates to those made of iron is universally acknowledged and admitted. The question of cost alone enables the weightier metal to hold the supremacy. But the cost of producing steel is reducing fast. Two years ago, 1877, the steamship *Ethel* was built of Landore Siemens steel by Messrs. Mitchell & Co., of this town, for the firm of Clapham & Co. Her dimensions were, length, 210 feet between perpendiculars, 216 over all; 30 feet beam, and 17 feet 3 inches depth molded, or about 6.3 depth of hold. Guaranteed by builders to carry 1,300 tons on 14 feet 7½ inches draught of water. Engines compound, of 100 horse power; class of 95 years at Lloyds; and her price was £18,350, being about £14 1s. 4 d. per ton of carrying capacity. The boiler was also of steel.

The advantage of adopting steel claimed by those for whom the steamer was built was the saving in the weight of the hull of the vessel, Lloyds having allowed a reduction of 20½ per cent. on the usual weight of iron, thus making a difference of 73 tons. The builders were willing to construct the same vessel in iron for £17,000. This would have been a saving of £1,350. But the carrying power of the iron vessel would have been about 72 tons less than that of the one built of steel. It is advanced by the advocates of iron ships with self-evident force and truth that, by the expenditure of the £1,350 extra cost of the steel ship, an iron ship of still greater carrying power could have been built. Perhaps the larger iron ship would have cost rather more in insurance and cost of sailing—that is about all that can be advanced in favor of steel in this case. It may be claimed that steel ships have greater strength and lasting power. But it should be remembered that the Great Britain was built as long ago as 1846; and the John Bowes, the first screw collier, was built on the Tyne in 1851, and is therefore nearly thirty years old. There are several iron ships on this river which were running across the North Sea when the John Bowes was launched, and still seem to be doing good service. Moreover, at the present time, iron ship-plates are only about half the price of steel plates. But the price of steel is brought nearer to that of iron every day. In 1877 steel plates and angles—those used in building the *Ethel* on the Tyne—cost £13 per ton. The same firm of merchants are now having a steel ship built by the same builders, and the price of steel and angles in the present instance is £8 15s. per ton. Thus is the difference between an iron and a

steel ship of the dimensions of the Ethel reduced to £600. And against this difference the steel vessel has a superior carrying capacity of about 70 tons.

Steel ships were built in the United Kingdom twenty years ago. But after the year 1866 only three small vessels were built in the United Kingdom during ten years. The real start was made in the private trade in 1878, when eleven vessels were built of steel. At this moment there are steel ships being built all over the kingdom. How large a field lies open may be seen from the fact that of vessels classed by the committee of Lloyd's Register during 1878 there was a gross tonnage of 574,819, of which 52,657 was wood, 517,692 of iron, 4,470 of steel; *i. e.*, wood still retained 9 per cent. of the whole, and steel had only put in a claim for  $\frac{1}{2}$  per cent. The new material is destined, no doubt, to occupy nearly the whole field in the future.

The struggle between the two metals is carried on in this district with energy, ability, and at great cost. At the works of Messrs. Bolckow, Vaughan & Co., on the Tees, experiments by the new process for converting Cleveland ore into steel are being made every day under the superintendence of one of the inventors, and I am informed by a high authority in this branch of chemistry that success will undoubtedly be the final reward.

I will close my report by quoting what seems to me to be the clearest condensed account of the new process that has yet appeared in print; it is from a report on steel ship-building made a few months ago by William Johns, esq., assistant surveyor, Lloyd's Register of Shipping:

A few words of explanation of this process may therefore prove interesting, especially as the accounts of it which have appeared in the press have for the most part conveyed a somewhat erroneous idea of the principle involved in it. It is well known that the obstacle to using Cleveland ore for steel-making is the difficulty of extracting the phosphorus, and it has been said that a new lining has been found for the Bessemer converter which absorbs the phosphorus, and thus enables the cheaper ores to be used. This is not quite correct, as the phosphorus does not get into the lining but into the slag, and it is the affinity of the slag for it which gets it out of the iron.

Briefly stated, the difference between the new and the old process may be explained as follows: In the Bessemer converter by the ordinary process, where steel is made from hematite ores, the molten iron alone is run into the converter, and air at a high pressure of 28 or 30 pounds per square inch is forced through a number of small holes or tuyeres in the bottom of the converter, and passing up through the metal, oxidizes the carbon, silicon, and other impurities, but not the phosphorus. The carbon passes off as a gas, and its flame indicates the progress of the "blow."

The silicon, however, on becoming oxidized, forms a slag, which floats on the surface. This silicious slag is what is termed an "acid slag," and has no affinity for phosphorus, and its existence prevents the possibility of blowing out the phosphorus.

The presence of this acid slag added from the first, with the intense heat, to the difficulty of getting a lining to stand in the Bessemer converter. This was got over by the Ganister lining, which is of an acid of silicious nature, like the slag, and therefore not affected by it.

The object of Messrs. Thomas and Gilchrist, the inventors of the new process, was first to convert this acid slag into what is termed a "basic" slag, that has an opposite tendency, and has an affinity for phosphorus. This they are able to do by putting lime and oxide of iron into the converter with the metal, and then comes the difficulty with the lining.

The "basic" slag while extracting the phosphorus would eat away the silicious lining, and in doing so would be itself neutralized, so that a "basic" lining had to be found to work with the "basic" slag, and stand the great heat of the converter. In other words, an acid slag requires an acid lining, and a basic slag requires a basic lining. This latter was at last found by making magnesian limestone bricks, fired at a very intense temperature.

The inventors had worked at this process for several years, their first experiments having been made at the Blaenavon Steel Works, where also their first successful bricks were made, and it was only after this company went into liquidation that an arrangement was entered into with Messrs. Bolckow, Vaughan & Co. to carry the system out on a larger scale.

Many difficulties were met with at first in making the bricks, chiefly owing to the enormous expansion and contraction causing them to split and break up. This has been got over, and the lining now stands as well or better than the ordinary Gaisner lining. A specimen of the new brick lining was obtained for the inspection of the committee, as were specimens of the steel made from the Cleveland ore.

The company are now working regularly with a 2-ton converter by this process, making steel castings for their own use, under the personal superintendence of one of the inventors, but as each charge is more or less experimental, owing to their using different mixtures for forming the slag, greater caution has to be exercised in the blowing down, and samples of the metal are taken out towards the end of each blow and tested under the steam hammer.

Portions of the slag and metal are also taken for chemical analysis, so as to ascertain accurately the action of the converter at different stages. Beyond these features the system appears as simple and definite as the ordinary work of the Bessemer converter making steel from hematite ores, and it is expected shortly the process will be capable of being applied commercially at the company's steel works at South Bank, Eston, in which case, provided the quality of the steel can be kept up, a material reduction in its price will be possible.

The same principle of changing the slag and lining from an acid or silicious to a basic or magnesian nature applies also to the Siemens-Martin furnaces, and it is stated that at Thylé Château, in a Ponsard furnace, which is a combination of the Siemens and Bessemer processes, very admirable results have been obtained by the use of Thomas's lining and basic additions when using phosphoric pig.

I have laid the several papers, read before the Iron and Steel Institute last month by Mr. Williams, the president of the Institute, Mr. Barnaby, and others, under contribution towards the foregoing report; and I am also indebted to Mr. Pattinson, analytical chemist of this town, and to articles which appeared in the Daily Chronicle, for much valuable information.

EVAN R. JONES.

UNITED STATES CONSULATE,  
Newcastle-upon-Tyne, June 17, 1879.

## THE REVIVAL OF TRADE, THE LAND QUESTION, PATENT LAWS, AND POST-OFFICE SAVINGS BANK.

*Report by Consul Shepherd, of Bradford.*

### REVIVAL OF TRADE.

Since my last annual report, No. 33, of date January 13, 1879, the trade of Bradford has taken a turn for the better, and is, so far as America is concerned, back to the figures of 1875. The actual change in pounds, shillings, and pence has not been great, but the improvement is in general feeling and in a belief that the near future will bring a return of prosperity.

The extent of this feeling is, perhaps, best illustrated by the fact that mill property has appreciated in value, and rules say 20 per cent. higher now than six months ago. Until July nearly all merchants and manufacturers vied with each other in pessimist views of the future, but during the last days of September came the large American wool buyers, followed at once by large orders from China and Japan for heavy worsted goods; hence after that month the price of wool began steadily to advance from 20 cents per pound until it has now reached 30 or 32 cents. Strange to say, however, the increase in price of the raw material has not affected the price of pieces in anything like a proportionate ratio.

About the same time (September) the demand from America for iron became noticeable, and increased until Sheffield and all other iron works



are not only fully employed, but have as many orders ahead as they dare to accept. How long this demand will continue, I am not at all in a position to judge, but I fear it is in trade as in nature—the more active the eruption of a volcano the more certain it is soon to subside. After the increased activity in iron came sudden and enormous orders from China for cotton goods, and while those orders continue Manchester will reap a great benefit.

In the matter of iron I believe that the prospective demand is overestimated, and that overproduction will be the result.

Still later the continental call for yarns began to increase, and at present the spinners are "full of orders," and realizing good profits.

As the price of wool began its advance, merchants naturally thought best to "place" at the low figures all orders upon their books. These purchases of yarns, which soon cleared out all stocks which had accumulated in the hands of the spinners, and the low stocks of raw material in the hands of manufacturers at the time the rise commenced, together with the American demand, have kept the wool market most active and buoyant, and will, in my opinion, send it gradually higher.

If the report gets confirmation that, because of disease, exposure, &c., sheep have been dying in England by thousands, and that the prospects are poor for anything like a large clip in 1880, the price can hardly be foretold.

That the trade of Bradford and England generally will improve I must fully believe, the former particularly, if luster goods again come into fashion; but that it will ever reach its old figures or profits I entirely disbelieve. I do not consider such a state of things as necessarily inimical to English interests, for I believe the former excessive prosperity was as unfortunate as the late excessive adversity.

The activity in iron, wool, yarns, and cotton goods of course leads people interested in oils, chemicals, soaps, and other articles of commerce to believe that the demand will, in time, reach the commodities in which they are interested, and so, to a certain extent, it no doubt will. Undoubtedly, prosperity in any one branch of industry benefits all others, but I fear not, in this instance, to such an extent as to justify the speculations entered into, nor the preparations and outlays made on all sides.

After times of unusual depression, sudden and unexpected demand for some particular article or articles often produces spasmodic excitement in everything else; but, if such excitement be temporary only—without a sound foundation—the reaction is felt only the more severely. Good crops alone can insure that foundation, and, as the harvests of England and the Continent have been so exceptionally bad, I argue that satisfactory prosperity is not yet at hand.

Any country naturally and properly fights against losing commercial supremacy, and, while I am not at all ready to prophesy that England is doomed to drift toward the position of Holland—her mineral resources are too varied and great for that—still I believe that the center of commercial and financial gravity is moving westward; nor must England expect to be forever the distributing station for the world's commerce. That England is, or soon will be, in a decline I do not assert; but I do believe that history repeats itself, and that she has reached the highest pinnacle of strength and commercial prosperity.

London will always be one of the great money-centers of the world; still I believe that the next decade will see every stock and share of the world quoted in the New York market, and the greatest loans of the globe negotiated in her banking-houses. I am not claiming superiority

for the American *people* in advancing these opinions, only for the *country*.

With the fairest part of a great continent in their possession, with freedom from the excessive cold of Canada and the enervating, sickly heat of Mexico, with everything within their borders with which to provide for themselves and supply others, the virtue of prosperity is nothing as compared with the ignominy of failure. It is, of course, fortunate for the United States that they are free from the necessity of maintaining large standing armies for the purpose of gratifying personal jealousies, avenging sentimental or imaginary wrongs, and defending hallucinatory rights.

Business between Bradford and the Continent, if yarns are excepted, has not increased, while the general home trade, the great demand of England—six times more than all the foreign trade, according to Lord Derby—is as slack as a year since; nor can it, in my opinion, improve to any considerable degree until a good harvest has been secured, or, at least, the prospect for one is most promising.

America and the East are the only sections of the globe from which Bradford has experienced an increased demand, excepting, as before said, in the matter of yarns. Within the past year not a few operatives and experienced foremen have gone from Bradford to the United States, while large quantities of new and second-hand looms, also other manufacturing machinery, have found their way across the Atlantic. I look upon this increased exportation of machinery and raw material as a most pertinent comment upon the future commercial relations of the two countries.

Of all rivals on neutral ground—and I do not say it boastingly—England most fears America, and proof that the thoughts of the nation are continually upon us lies in the fact that hardly a newspaper can be taken up which does not contain some article upon, or reference to, the United States.

In accounting for the general bad trade of Europe one must not forget the fact that the Continent is one huge barrack; that three hundred millions of people are kept in a constant state of fermentation and uncertainty, while standing armies of four millions of men—to say nothing of large and excessively expensive navies—are not only lost to the industries of Europe, but are, by profession, constantly consuming and destroying; and that additional auxiliary forces of six millions of men are under constant discipline and ready for service. This incubus of ten millions of soldiers is naturally followed by constantly increasing, and in some cases almost hopeless, national debts, while governments are led into that delectable system of finance which teaches its disciples the art of living upon what they owe.

#### THE LAND QUESTION.

The land question, to which I alluded in my No. 37 of May 13, 1879, is perhaps the most prominent home question of the day, and a royal commission was appointed during the last session of Parliament to look into and report upon the “agricultural depression.” Although the confession may only prove my simplicity, still I must maintain that the whole question is most simple.

Heretofore, in agriculture, as in manufactures, England had no dangerous competitors. Beef and grain sold at almost whatever prices the farmers demanded, landlords placed high value upon their farming and grazing lands (\$250 to \$500 per acre) and expected an interest of 2

or 3 per cent. Farmers and their sons, being prosperous, spent much money and worked little, while the laborers, to say the least, received living wages. Now all is changed. The farmer finds that his £50 or £100 land is competed with by £5 or £10 land in the United States and Canada which will produce just as much grain and of as good quality as his own. He (the English farmer) must pay tithes to the church, must pay an income tax upon half the rental of his farm, must tolerate ground game (foxes, hares, and rabbits), and in addition his landlord and friends must be allowed to ride and tramp over his fields to the destruction of his crops, while his rivals in the United States and Canada pay no tithes, pay no income tax, and treat ground game as vermin.

Lord Beaconsfield says that land in England must support three classes—the landlord, the farmer, and the laborer. Why he does not name five, and include the church and ground game, I cannot quite understand.

Supposing, therefore, that English land must support all these classes, it is only so much the worse for that land, as in the United States and Canada three of these classes—the landlord, the church, and the game—are eliminated.

Canada is asking the English Government to loan her money to build a railway toward Manitoba, but as every foot of railway built or communication opened with the West, either in the United States or Canada, only cheapens grain in England and makes it harder for the landlord and farmer of Great Britain to live; and also as the Canadian Government discriminates against the mother country in the matter of duties, I should say the request has little chance of favorable consideration.

To me it seems a simple, comprehensive, and reasonable assertion that, irrespective of what nominal value land may be held at in England, its rent must come down to an amount, however small, which will allow the English farmer to compete with his Western rivals and still live. That seems to me to be the statement of the whole case in a nut-shell. There are only two other courses open—desertion of farms by the farmers, or their protection by the government.

Interest on £50 (\$250) or £100 (\$500) land will have to come down to the interest on £10 (\$50) or £20 (\$100) land, *with the cost of transportation from America and Canada added*, which on corn is (from Chicago to Liverpool) about 34 cents (17*d.*), and on wheat about 54 cents (27*d.*) per hundred pounds.

Allowing that seasons may be worse in America or better in England than that just past, admitting that prices will always be affected by circumstances, still I believe the broad statement that England cannot compete with the United States and Canada in grain is fully warranted.

Appalled by the great decrease in revenue, landlords will, I think, entertain the idea of selling estates and investing in other ways; and through self-interest, rather than from law, I look to a great revolution in the ownership of land in England within the next five or ten years.

Should the land of England come, in any great bulk, to be sold to small farmers, I predict that the price realized and the price at which it is at present held will be found to widely differ. I do not believe that landlords will, to any great extent, become farmers, as is predicted, but rather that they will sell to those whose only interest will be to husband, cultivate, and economize the land up to the highest possible point. Of all systems under the existing *régime*, the Earl of Leicester has, in my opinion, the best. He gives leases for 20 years, and for 16 years al-

lows the tenant to farm as he likes—in fact, puts no restrictions upon him until the end of 16 years, when the farmer has either to renew his lease for another 20 years or return to the four years' rotation requirement.

Theoretically this system would seem to be without injustice to either party. It has been claimed that were all the private parks turned into grain farms, imports of that nature would be unnecessary. How much foundation there is for the statement I cannot say; but certainly if these huge and expensive luxuries are continued the farms cannot be made to support and pay for them, as formerly.

#### PATENT LAWS OF ENGLAND.

As the patent laws of the different countries are becoming of more and more interest to each other I have deemed those of this country a matter worthy of investigation and report.

I believe "oppressive" is a mild epithet to apply to the patent laws of England. The expense of procuring a patent is so great that the laboring inventor is generally unable to bear the cost, and the fruit of his genius too often passes for a mere song into the hands of his wealthy employer. Hence, the object of patent laws fostering, securing, and assisting the poorest as well as the richest inventor is largely defeated by the English law.

Another most unfathomable, and I may say unjust, feature of the English patent law is the fact that the issuance of letters patent by the government is no guarantee nor assurance that exactly the same invention has not been patented before; that is to say, two patents for exactly the same thing may be granted on the same day, one by the attorney-general and the other by the solicitor-general, the patentees being left to establish and defend their rights in a court of law. The master of the rolls—a high authority—has said that in England not one patent out of a hundred is valid. In the United States no letters are issued until, upon thorough examination, it is found that a patent for the same thing has never before been granted. In the United States, also, one of the largest government buildings is the Patent Office, while in England that department is divided between a few rooms in Southampton buildings and a like number at the Kensington Museum.

The *modus operandi* of securing a patent in England is as follows:

A petition must be accompanied with £5 (\$25), "provisional specifications," and an affidavit that the applicant is "the true and first inventor," and that to the best of his knowledge and belief the article has never been made or used before. No model is required. The application is then referred to a "law-officer of the Crown"—not to an expert in the particular branch or science—and if it is *prima facie* an invention that officer grants a "provisional protection" for six months.

As soon as provisional protection is granted the applicant may give notice of "intention to proceed," for which another £5 (\$25) is required. Twenty-one days are then allowed for "objections," but as the specifications are not yet published—cannot be seen for six months—the theoretical privilege of caveat is practically nil. At the end of the twenty-one days if no "objections" are filed (and they cannot be so long as specifications are kept secret), the great seal is granted, upon further payment of £10 (\$50). I am informed by a most reliable patent agent that he can obtain as many patents for the same thing as he likes to make application and pay for, and that out of five hundred applications made by him

in England not one has been rejected, while in the United States, out of fifty applications fully one-third have been refused.

After six months, upon the presentation of "final specifications," fully describing the invention, and the further payment of £3 (\$25), a patent is issued for three years; upon a payment of £50 (\$250), for four additional years; and upon a still additional payment of £175 (\$875), for a fourteen years' patent.

Against this state of things in England the privileges of the United States may be instanced, where, upon payment of £7 (\$35), complete patents are issued for seventeen years. The attorney-general of England proposes a new law, which shall bring down the three years' patents to £12 10s. (\$62.50), but which will increase the expense of twenty years' patents to £272 (\$1,362.50).

#### POST-OFFICE SAVINGS BANKS.

It is more pleasant to compliment than criticise, hence I take great pleasure in calling attention to a most paternal and beneficial provision of the English Government, namely, its post-office savings-banks. They were established in 1861, are coexistent with the money-order offices, and have for their avowed object the "fostering of habits of thrift in the people." Their success has been most thorough and satisfactory. Five thousand eight hundred and thirty-one of these offices exist in the United Kingdom. The minimum deposit is one shilling (25 cents), the maximum in any one year £30 (\$150), and the maximum altogether for one person £150 (\$750).

The deposit is simply a loan to the government, and the interest paid is  $2\frac{1}{2}$  per cent. on all amounts of a pound or over. Upon amounts below a pound no interest is paid, and therein lies advantage to the government.

Bradford, a borough of 175,000, has 14 within its corporate bounds. In the kingdom there are 3,360,636 depositors, and the total amount on deposit is £9,485,391 (\$47,226,955), while the cost of management is £448,543 (\$2,242,715).

Out of 10,572 accounts in 18 different offices, the class of depositors was found to be as follows:

Class.	No. of depositors.	Average balance.
Female servants .....	1,664	£14 \$70
No occupation .....	1,279	13 65
Artisans .....	1,236	15 75
Minors over seven .....	1,188	7 25
Married women .....	1,186	21 105
Tradesmen .....	857	16 80
Clerks .....	675	11 55
Laborers .....	579	21 105
Unmarried women .....	465	16 80
Minors under seven .....	397	5 25
Male servants .....	297	22 110
Public officials .....	227	40 200
Soldiers and sailors .....	225	18 90
Professional men .....	222	20 100
Milliners .....	187	11 55

Should a depositor change his residence, simple and inexpensive means are provided whereby he can transfer his account.

It is claimed, and I doubt not most properly, that the establishment of the savings-banks has been an incalculable boon to the working

classes, and that not a small proportion of the money on deposit would have been expended in drink or useless, if not hurtful, ways had it not been for these institutions, and the easy access to them. Surely nothing higher could be said in their praise.

The fact that the post-office matters of England are, in general, managed so perfectly only brings out in stronger contrast the few points in which they are defective and illogical. I will speak of two points which strike me as the most marked. I believe I am strictly correct in saying that in every part of England other than London there is a delivery on Sunday mornings, and a dispatch on Sunday evenings; but in London—the very heart and center of England, the most important point to hear from or communicate with—there is neither delivery nor dispatch on that day. A person writing on Saturday night from London to Bradford may receive an answer to his letter on Monday morning, while a letter posted at the same time in Bradford for London will only be *delivered* on Monday morning, and the answer only received by *Tuesday* morning.

Mails only pass *through* London on Sunday; hence a letter posted in Bradford at 8.20 on *Sunday* evening will reach Paris at the same time as a letter posted in London at eight o'clock on *Saturday* evening; and although a letter will not leave London on Sundays, it will leave the nearest outlying post-office; therefore people frequently ride to Richmond or Kew on Sunday afternoon and there post letters for the provinces or Paris, thus securing their delivery in either place on Monday morning. One hardly knows how to characterize such inconsistencies.

Another example: Mail trains leave Queenstown for Dublin, Holyhead, and London at 11.30 a. m. and 9 p. m., and although the Inman, Cunard, White Star, and other steamship lines bring from New York the weighty United States, Canadian, China, Japan, Australia, and New Zealand mails, they must lie in Queenstown from nine and a half to fourteen hours, *unless the steamers happen to arrive at train times.*

No special train is, under any circumstances, dispatched with these important mails; hence the anomaly of irresponsible steamers accommodating themselves to self-governing trains, instead of the trains to the steamers. Twenty-four hours' delay is thus often caused in the delivery of letters in London. I do not know of any direction in which a small expenditure would work so great good to so great a number as in remedying this injurious detention.

C. O. SHEPARD.

UNITED STATES CONSULATE,  
*Bradford, February 2, 1880.*

## IRELAND.

### THE IRISH LAND QUESTION.

*Report by Consul Barrows, of Dublin.*

#### ULSTER TENANT-RIGHT CUSTOM.

The tenant-right usages adopted by the best landlords, and the principles involved in them, may be briefly stated as follows:

- I. Compensation for improvements.
- II. Compensation for change of possession, or payment for good-will.
- III. Questions preliminary to tenant-right legislation.

1. Compensation for improvements divides itself into two branches :

(a) Compensation in respect of improvements made by the outgoing tenant himself.

(b) Compensation in respect of improvements made by a preceding tenant, whose claim the now outgoing tenant satisfied on entry.

2. Compensation for change of possession or payment of good-will comprises all the arrangements that induced an outgoing tenant to leave the farm voluntarily, and includes :

(a) Cost of migration of the outgoing tenant and his family to England, Scotland, or some large town in Ireland, or the cost of emigration to America, &c.

(b) Some annuity or allowance in kind or cash payment to an outgoing tenant, to prevent his having to go into the workhouse.

(c) In the case of consolidation of farms, or on the landlord resuming possession into his own hands, compensation for the disturbance of the tenant's business, and his loss in having to look out for a new farm or new mode of employment.

#### I.—COMPENSATION FOR IMPROVEMENTS.

##### 1. (a) *Improvements made by the tenant.*

If the tenant's claim under tenant-right usages had been confined to the element of improvements made by himself alone there can be little doubt that it would long since have been recognized by the courts in Ireland, as similar usages have been in the courts in England and Scotland.

In Dixon's Law of the Farm, the law of England on this subject is thus defined :

The claim for remuneration which an outgoing agricultural tenant has on his landlord for various operations of husbandry, the ordinary return for which he is precluded from receiving by the termination of his tenancy, is termed "tenant-right," and is governed by the different customs which have long prevailed in the counties and districts of the United Kingdom.

Tenant-right extends to the crops which the outgoing tenant has sown and leaves in the ground, and to the remuneration for the preparation of the soil for crops by tillage, for straw, hay, and occasionally dung left on the farm, and for growing underwood. Of late years the term [tenant-right] has happily been understood in a much wider and more liberal sense, and in many parts of the country a usage has sprung up which confers a right on the outgoing tenant to be reimbursed for certain expenses incurred by him in cultivation beyond those of mere ordinary husbandry.

The manner in which these customs are growing and extending, so as to cover the tenant's expenditure on the farm, is detailed under the different counties, in the above-named book, viz :

As to Northamptonshire it is stated, during the last three years (1859-'62) an allowance for under-drainage has been common. In Kent there was once no allowance for the improvement of buildings, but now it is generally considered that the tenant has a right to be paid for all buildings erected by him with the landlord's consent, &c.

Although the English claims are thus recognized as legally binding against the land, or landlord, it appears that, just as in Ireland, "the compensation agreed to be paid by the landlord to the outgoing tenant is in practice paid by the incoming one." Thus, it is argued, the objections to Irish tenant-right, founded on the alleged absurdity of the incoming tenant buying it, which are urged most strongly by those who insist on an exact copy of English law and practice, turn out to be without foundation, as this part of the Irish practice is in exact conformity with the usual practice in similar cases in England. It is sometimes alleged that the Irish usage, however moral or right in point of conscience, cannot, for want of antiquity and uniformity over large districts, be legally recognized.

It appears, however, that the English usages are quite distinct from

the ancient common-law customs, and are so recent that they are now springing up and in a state of growth.

As to the alleged difficulty and want of uniformity in the Ulster usages, Mr. Dixon describes the English customs as most conflicting and difficult. In many counties they scarcely exist at all, in others it is rather the custom of districts, and in many the custom merely of certain estates.

The difficulty is, in England, treated as a matter of detail, and the want of uniformity is not urged to defeat a fair claim. And the usages are imported into leases or agreements for the letting or occupation of land; *and unless the agreement, expressly or by implication, excludes the custom of the country*, the landlord and tenant are presumed to contract with reference to it.

The chief struggle in Ireland on the part of the tenant has been to obtain for the Irish usages and claims, involving the same principles, the legal sanction which English usages have long since attained to.

In bringing the light of the various English tenant-right usages to bear on the Irish land question, we must follow the principle we act on in making a treaty with a friendly power. We usually consent to put it on the footing of the most favored nation. The Imperial Parliament should not, therefore, refuse to Irish tenants the extension of any principle that, under these usages, the tenants in the most favored districts in England have succeeded in getting recognized by law. (Professor Hancock's Report on Tenant Right.)

These wise usages are imported into leases and agreements, and unless the agreement expressly or by implication excludes the custom of the country, the landlord and tenant in England are presumed to contract with reference to them.

This has been done [says Baron Parke] upon the principle of presumption that in such transactions the parties did not mean to express in writing the whole of the contract by which they intended to be bound, but a contract with reference to those known usages. The relations between landlord and tenant have been so long regulated upon the supposition that all customary obligations not altered by the contract are to remain in force, that it is too late to pursue a contrary course, and it would be productive of much inconvenience if the practice were now to be disturbed. (Hutton v. Warren, 1 Meesom and Welsby's Reports, page 466.)

The Irish tenant-right usages have sometimes been attacked from a Scotch point of view; that in Scotland everything is regulated by a written contract, and that such a "wild idea" as a usage going to the extravagant extent of payment for buildings without a written agreement is unheard of in that country. The following case, however, is reported in Bell on Leases, vol. 1, page 86, decided 14th June, 1864:

In a recent case (Bell v. Lamont) a singular successor, who had purchased during the currency of a lease, was found liable in a claim made by a tenant at the end of the lease for the expense of houses built prior to sale. The obligation of the landlord in this case did not appear even in the lease, the tenant's agreement being founded upon an alleged verbal agreement between the seller's predecessors and their tenants, and upon local usage. The judgment was founded upon the local practice, although there were no means by which the purchaser, who was a stranger, could discover the existence of such a practice.

#### 1. (b) *Compensation in respect of improvements made by a preceding tenant.*

As the dwelling-houses and farm buildings have usually been erected by the tenants in Ireland, and kept in repair by them, they form a very important element in the Irish tenant-right claims, and are obviously claims that would last for many years. The usage on the best estates being not to include the buildings in the valuation for rent, the buildings, so long as they last and continue suitable for the purpose for which



the tenant uses the land, are considered to be the foundation of a perpetual claim, for their actual value. Hence the tenant-right usages of Ireland, founded largely on buildings, become the subject of compensation from successive tenants on change of tenancy by death or otherwise.

In case of a tenant's death, some one member of the family is usually taken to succeed on the terms of carrying out the will of the father, or on other terms considered fair and just, for the benefit of the other members of the family. Such distribution of the proceeds of the tenant's claims is assented to by the agent or landlord as part of the terms of the new tenant succeeding. And the succeeding relative or tenant in each case clears off the arrears as part of the terms of succeeding.

## II.—COMPENSATION FOR CHANGE OF POSSESSION AND GOOD-WILL.

### (a) *Emigration-rate element of tenant-right usages.*

The tenant right usages and claims in Ireland all had their origin before Parliament made any provision for changing the cost of emigration or of the support of the poor on the land.

This important historic view is entirely overlooked by those who have criticised the tenants' claims so narrowly as to object to their being recognized in any system of compensation for improvements, because they contain beyond improvements an element of aid to emigration and assistance to poverty.

So far as tenant-right has afforded an aid to emigration, it is in truth an emigration rate, and is fairly and properly a charge on the land. Ever since the introduction of the poor-law into Ireland the state has recognized payments for emigration as a proper charge on land.

The amount at which Parliament estimated the obligation of the land of Ireland to provide for emigration in 1849 may be judged of by the limit placed on the borrowing powers of the poor-law guardians for emigration purposes by statute 12 and 13 Vic., c. 104. The money borrowed and outstanding at any one time was not to exceed 11s. 8d. in the £1 of annual value for persons chargeable to electoral divisions, and 2s. 4d. for persons chargeable to unions at large, or 14s. in the £1 in all. The poor-law valuation of Ireland in 1849 was £13,000,000; so that Parliament contemplated the possible expenditure of £9,000,000 on emigration, and the expenditure of that sum as a first charge on the land of Ireland.

In the report of the Irish poor-law commissioners for 1869 there is a return showing that instead of £9,000,000 the entire amount authorized by the poor-law commissioners to be expended under 12 and 13 Vic., c. 104, sec. 26, in about twenty years, from August, 1849, to March, 1869, was £119,280, and the entire number of emigrants assisted was 26,708.

The estimate of £9,000,000 appears to have been well considered, for the remittances of the Irish in America have amounted to upwards of £13,000,000 within the twenty years mentioned, and, allowing for the support of relatives at home, the cost of the emigration, which has been defrayed by the Irish in America, may be estimated at £9,000,000. The British Parliament contemplated that this £9,000,000 should come out of the land of Ireland, but the landed proprietors have managed, acting on the warm feelings of the Irish emigrants in America, by their powers of eviction, and by the administration of the poor-law, to shift this burden from the land of Ireland to the Irish laborers in America.

The principle which Parliament has thus sanctioned by various acts for upwards of thirty years, but which has been carried out to such a

small extent, had in Ulster been effected for years before 1838, and has during the years which have since elapsed been effected by the element of the tenant-right usages which treats the payment to an outgoing tenant, for the purpose of migration to England and Scotland, or to a large town, or for emigration abroad, though beyond the value of the improvements, as a good, proper, and a usual payment.

The existing usage is in case of a rate to which the land is liable, and a reasonable one. The reasonableness is shown by the practice which has been constantly adopted by wealthy capitalists, landlords contributing to the cost of emigration from their estates. It has a further advantage, not so obvious, that it provides sufficient means for emigration by families.

In an economical point of view these advantages are very great. The voluntary emigration of people too poor to emigrate in families leads to the emigration of the best and strongest of the population. It leaves behind the helpless and weakly of the family. The "Devon Commission" saw that the young, the strong, the enterprising, and industrious leave us, while the old, the impotent, the idle, and the indolent portion stay with us (Digest, p. 567). Family emigration is the best palliative of this evil, and the Ulster tenant-right has the certain effect of stimulating family, as opposed to individual, emigration.

*(b) Poor-rate element of tenant-right.*

The poor-rate element of tenant-right usages is intimately connected with the emigration-rate element last considered.

The obligation of the land to maintain the poor, which was finally established in England in 1601, was not extended to Ireland until 1838.

In Ulster, however, where there was a considerable proportion of small tenants of the same religion as the landed proprietors, a usage grew up for an incoming, when the allowance for improvements was insufficient for the purpose, to make some provision for an outgoing tenant, and for his family when broken down by age or poverty. In like manner one member of a family succeeding to the farm was expected to provide for any of the members who were helpless.

There is a great and fundamental difference in the poor-law and its administration in Ireland and in England, which I have already called attention to in my summary of the Irish poor-laws. In consequence of the stringent system still maintained in Ireland the usage of allowing a provision by improvements in the case of any risk of great poverty to the outgoing tenant still prevails, as the workhouse is thought too severe a hardship to inflict on those broken down by sickness or calamity without misconduct on their part.

Thus this poor-rate element of tenant-right compensation is ascertained to rest on reasonable foundation. It is a capitalized payment in case of poor-rates, which are admittedly a proper charge on land when made with the assent of the landlord or agent, as is usually done, and is therefore a reasonable and proper charge against remainder-men or creditors.

The statistics show the effect of tenant-right in easing the poor-rate. In 1868 Ulster, where tenant-right usages most prevail, the expenditure for the relief of the poor was 8½d. in the £1; in Munster in the same year, 1s. 5½d. in the £1, or more than double.

The daily number in receipt of workhouse relief in Ulster, with a population of 1,907,264, was 11,746, or 615 per 100,000; in Munster, with a population of 1,528,877, it was 18,893, or 1,234 per 100,000.

- (c) *Compensation for the disturbance of the tenant's business or his loss in having to look for a new farm or a new mode of employment.*

Under the tenant-right usages it has long been recognized that as agriculture is the pursuit of a lifetime there should be no hasty or arbitrary disturbance of any one who is following it as his trade or calling with honesty or success. Accordingly, under the tenant-right usages, when a landlord takes land into his own hands, or insists on consolidation of farms, he pays the outgoing tenant, or gets an incoming tenant to pay him, a sum in which compensation for dispossession is added to compensate for improvements.

### III.—QUESTIONS PRELIMINARY TO TENANT-RIGHT LEGISLATION.

- (a) *What would the legalization and extension of the tenant-right usages cost?*

It is sometimes said that the adoption of the tenant-right usages would amount to a confiscation of property. Now, what would their adoption really cost? The sum that is usually given on the best estates for compensation for change of tenancy, whether as emigration-rate, poor-rate, or compensation for involuntary change of tenancy, is about £10 per acre.

The incoming tenant is usually content with a very small rate of interest for the portion of his capital sunk in the purchase of tenant-right, about 3 per cent., a rate which is quite natural to expect when we find that £20,000,000 and upwards have been lying in the joint stock banks at 2 per cent. The cost, therefore, of establishing a liberal tenant-right would be 3 per cent. at £10, or an annual charge of 6 shillings an acre.

Mr. John Andrews, of Comber, who was for about forty years agent on the estates of the Marquis of Londonderry, in the county Down, a witness before the land-occupation commission of 1845, said: "A curtailment of tenant-right cannot be carried out without danger to to the peace of the country. You would have a Tipperary in Down if you attempted to carry it out" (p. 65). So much as to disregarding tenant right. The land under crop in the North Riding of Tipperary in 1867 was 130,042 acres, and the acreage under crop in the whole county has fallen since then. It appears from published statistics that the extra cost in police and soldiers of keeping the peace in the North Riding of Tipperary as compared with Londonderry was £72,567 a year, or in other words 11s. an acre (on the land under crop, including meadow and clover). So that as far as the North Riding of Tipperary is concerned, 11s. are annually spent per acre to resist the claim of 6s. an acre. This 11s. an acre falls chiefly on the general tax-payers; for, although property in land was originally held liable through military service for the cost of soldiers, the cost of soldiers is now paid by the general taxes; and the cost of police, owing to the compensation to the landlords for free trade, is now, except for special police, borne by the general tax-payers, the land of Tipperary paying only £3,881 and the general tax-payer £66,186 a year of the above-named extra charge of £72,567.

- (b) *What would be the effect of the recognition of tenant-right usages upon rent and upon the value of land.*

In considering the tenant-right usages on a basis of legislation it is important to clearly understand that any reduction of rent that might

possibly be involved in their adoption, as such basis, would be only of a temporary character, and that their general tendency is to secure the landlord the fullest rent with improved security for its payment.

It is clearly understood that the landlord should receive the benefit of all increases of value, except such as arise from the tenant's industry and capital, and accordingly rents have risen throughout tenant-right districts with the progress of the country. As a necessary consequence of this it has also been recognized that when there is a fall in the value of land from other causes than the tenant's neglect there should be an abatement of rent. This was promptly conceded at the time of the famine, and abatements of rent were very generally made.

That the liberal treatment which the tenants received during the famine in the tenant-right districts has benefited instead of injuring the landlords in the long run is shown by the evidence given before the lord's committee on the tenure (Ireland) bill, 1867, by Mr. William Stewart French, who is agent on extensive estates in different parts of Ireland. He says:

I think the land in the North of Ireland, with which I am acquainted, is let higher at this moment, in proportion to its intrinsic value, notwithstanding the tenant-right which exists there, than the land in other counties which I have to deal with.

This simple statement disposes of the impression that whatever is conceded to the tenant must be injurious to the landlord, conveyed in the phrase "tenant right is landlord wrong". In fact the interests of the two parties are only temporarily opposed.

Professor Hancock, in a paper published by the Statistical Society, Dublin, advocating the legalization by Parliament of the tenant-right custom in Ulster and its extension to the other provinces in Ireland, says:

The rent of land which can be paid by a tenant without injury to the work of production is the difference between the value of the produce and the cost of production. The value of the produce depends on the quantity raised and the price in the market. Over the price in the market the tenant has no control, and considering the market Ireland has for her agricultural produce, no increase in what can be raised would affect the price. The quantity of produce raised depends chiefly upon the security afforded for the application of skill and capital in the work of production. So that whatever increases the security of the tenant in his business has an inevitable tendency to increase the produce.

The cost of production depends partly on the amount of the labor and capital employed in each quantity of produce produced and partly on the rate of wages and the rate of profits. It is obvious, however, that the more secure the farmer is the less rate of profit he will be satisfied with for whatever capital he employs, and the less rate of interest he will have to pay for any he has to borrow on an emergency. With regard to labor, too, the more improvements a tenant is induced, by security, to undertake and carry out, the more continuous employment he has for himself and his family on the farm; and so, though the total amount earned by the farmer in the year is greater, the continuous family labor, as charged against the cost of production, is really paid for at a lower rate. Again, so far as the farmer is an employer of labor, the work of a hired laborer applied to land in a highly improved state is more fruitful in its results; and thus, after paying for this hired labor and for the farmer's profit on capital and reward for superintendence, a larger surplus remains for the landlord. I may add that the more continuous the employment is, whether it be family labor or hired labor, the greater economy there is in the use of labor, and the more constant and active use is made of all capital invested in buildings and agricultural implements; so that the well-known fact that security of possession has a tendency to raise rent is really a very simple conclusion of economic science.

#### LAND CUSTOMS OF THE CHANNEL ISLANDS.

Before concluding this abstract of the Ulster tenant-right customs, I wish to refer to one published in the Fortnightly Review for October,

"The Channel Islands", written by G. Shaw Lefevre, esq., M. P. The author visited Guernsey and Jersey with the view of verifying the accounts given of the small yeoman proprietors of these isles. Mr. Lefevre says that the condition of these yeoman proprietors presents so many contrasts with that of the small tenant farmers of the United Kingdom, and especially of Ireland, that he wishes at the present moment, when attention is specially directed to such subjects, to explain and account for it. I shall refer here only to the portion of the article—a most able and interesting one—that refers to Ireland. He says, page 486:

Reverting to the laws affecting the tenure of land, it will be seen that they greatly favor the distribution and division of property. Practically the principle of compulsory heritance which prevails throughout a great part of the continent of Europe, and under which land must be apportioned among the children, prevails also in the Channel Islands, subject to a very slight advantage in favor of the eldest son.

The islands have been saved from the introduction of the feudal law upon any such scale as to have any practical effect. They have also resisted any attempt to introduce the English system with all its intricacies of family entail, &c. "The people of the islands are devoted to their system of land tenure." "They attribute to it the fact that property is distributed so widely, and they assign it as the cause for the universal thrift and industry and saving habits of the people, which have led to such remarkable results in the aggregate wealth and prosperity of the islands."

The area of all those islands together does not exceed 50,000 acres, of which nearly one-third is irreclaimable. The population under 90,000.

In the civilized world it is probable that there is no community where there is greater wealth in proportion to the people or more widely distributed than in the Channel Islands.

The islands are greatly favored by exemption from imperial taxation; they pay the expense of their own administration and the charge for public works is not low. "The tax for the militia, which amounts to a week's service for every able-bodied man, is not to be disregarded." "Everything tends to show that the aggregate wealth of the population is very great."

What, then, is the cause of this general prosperity of the widely diffused wealth, and of the universal industry and thrift which is so remarkable?

Is it due, as the island-thinkers believe, to their land laws, which discourage the aggregation of property and favor its distribution among the members of a family, and to the fact that the island people have never permitted the introduction of the English land laws, which they believe to have an opposite tendency?

It is almost impossible, and therefore almost useless, to conceive of the English system of large farms in an island like Jersey; but it is not difficult to conceive the substitution of the Irish system of small holdings formed by tenants.

There are very many estates in Ireland belonging to single individuals of a larger size than either Jersey or Guernsey, and farmed by a tenantry almost as numerous as the small owners of these islands. Some of them must be almost as fertile. Let us suppose one of average Irish fertility which is considerably below that of the islands. Is the production of such average Irish property what the land is capable of? Are the tenants prosperous and contented? Are the rights of property safe and as unquestioned as they are in the Channel Islands?

## CONDITION OF THE SMALL FARMERS IN IRELAND AND THE CHANNEL ISLANDS COMPARED.

Professor Baldwin, head of the Agricultural College, Glasnevin, near Dublin, says:

In most parts of Ireland the agricultural practices of the small farmers are very defective, in some places they are quite primitive. \* \* \* The dwellings of a vast number of small farmers in Ireland are wretched. There are 4,000,000 acres of medium land, now growing poor herbage which often contains more weed than grass. \* \* \* The state of the cultivated land of Ireland is also very defective. Tillage is done in a slovenly manner, live stock not as profitable as it ought to be, want of drainage a crying defect, at least 6,000,000 acres in want of drainage. This work could be effected at a cost of £5 an acre, the letting value increased thereby £3,000,000 a year.

It may be asked where all this money is to come from. The answer given by Professor Baldwin is:

The greater part of it is in the labor of the people. The working farmers of Ireland have a great deal of labor in their families which could be most usefully employed in draining their land. Every experienced agriculturist who carefully considers this category of defects will agree that the smaller farmers of Ireland could, by adopting modes of management which are within their reach, double their income.

In many parts of Ireland, Professor Baldwin says he found the greatest objection to compete at agricultural exhibitions for prizes freely offered for good cultivation, arising from a prevalent feeling that rents would be raised on those successful in the competition, and that the co-operation of the land owners was the result of a settled desire to use the system (competition for prizes) as a cloak for raising rents.

Everywhere we are met by the same difficulty and hesitation, the owner cannot supply the necessary capital, the tenant will not do so through fear of rents being raised; he will not even cultivate his land to the best of his ability through the same fear; there is, therefore, a vicious circle from which there seems to be no escape.

Comparing, then, this result with the Channel Islands, we find in Jersey and Guernsey production evoked to the farthest limit which the land is capable of; we find a universal spirit of industry and thrift; we find content in the highest degree, and the rights of property never questioned. Is it not, then, a safe inference to draw from the comparison, that in one case this happy state of things is due to the stimulating influence of a distributed ownership of land, and that in the other case the low rate of production, the chronic discontent, the want of industry and thrift, above all the fear of improvements lest the rent should be raised are due to the very limited ownership of land, to the fact that for centuries the law and administration of Ireland have tended to discourage the existence of a numerous proprietary, and to accumulate land in the hands of a few?

B. H. BARROWS.

UNITED STATES CONSULATE,  
*Dublin, December 16, 1879.*

## ITALY.

*Seven reports, prepared by Consul Crosby, of Florence, on the following subjects: 1. American flower and vegetable seeds in Italy. 2. Cultivation of wheat straw and manufacture of straw goods in Tuscany. 3. How American patrons of art are defrauded in Italy. 4. Borax as a substitute for salt for the preservation of butter. 5. Production and consumption of salt in Italy. 6. Steel rails in Italy. 7. Tariffs of Italy, general and conventional.*

## 1.—AMERICAN FLOWER AND VEGETABLE SEEDS IN ITALY.

I beg herewith to inclose a copy of a letter just received from the Marquis of Ridolfi, vice-president of the Royal Tuscan Horticultural Society, acknowledging the receipt of different varieties of flower seeds, sent by me to the society some time since.

In February last I wrote a private letter to Mr. McMurtrie, ex-commissioner for the United States to the International Exposition at Paris, asking him, on his return to America, to request General Le Duc, Commissioner of Agriculture, to send me out for distribution in Tuscany a variety of flower and vegetable seeds, and a few days since I had the pleasure to acknowledge the receipt of a large package. The garden seeds and grain have been distributed to the agricultural society and private individuals throughout Tuscany, and for which I have received most grateful acknowledgment. It will be noticed that the horticultural society (and others have made the same offer) express its desire to forward through me any seeds or plants native to this country that the Department of Agriculture in Washington may desire to have.

[Inclosure.]

*The Marquis of Ridolfi to Mr. Crosby.*

ROYAL TUSCAN HORTICULTURAL SOCIETY,  
*Florence, April 16, 1879.*

SIR: It is with the greatest satisfaction that I comply with the duty conferred upon me by the committee of the Royal Tuscan Horticultural Society of thanking you for the agreeable present of various seeds of North America, which you have been pleased to give to me, and which I consigned for a trial to the gardener of the experimental garden of said society.

I trust that you will be so kind as to procure for the said society, in the future, other seeds, which would be most acceptable, and I would undertake to exchange for them others for whichever of the American horticultural societies you might be pleased to mention, for the mutual advantage of both countries, the commercial interests of which you so deservedly represent, and also of that in which you reside, where you are an esteemed and welcome guest.

With the sentiments of the most sincere respect, I beg you to accept kindly the assurance of my deep esteem.

The vice-president:

NICCOLÒ RIDOLFI,  
*Marquis of Ridolfi.*

Colonel Crosby,  
*United States Consul at Florence.*

## 2.—CULTIVATION OF WHEAT STRAW AND MANUFACTURE OF STRAW GOODS IN TUSCANY.

I have the honor to make to the Department of State the following detailed report on the subject of straw and straw goods, which are the most important articles of exportation from this consular district to the

United States, the culture and manufacture of which gives profitable employment to thousands of poor people of both sexes and all ages throughout Tuscany.

#### THE CULTIVATION AND MANUFACTURE OF WHEAT STRAW IN TUSCANY.

*Source.*—The manufacture of straw hats has been a special art in Tuscany for many centuries, and Signa, one of the most industrious of Tuscan towns, was for a long time the center of this trade, which, however, was of little importance and limited until the seventeenth century. The straw being rough, without uniform color, the hats were naturally coarse, and were worn only by laborers. These hats first reached the sea-coast through some of the boatmen from Ponte a Signa, and who afterward brought to Leghorn full cargoes for sale especially to English seamen, who admired more the ingenious braids than their usefulness.

In 1714 Sebastiano Domenico Michelacci, of Bologna, went to Signa for the purpose of obtaining work. After being there a short time he observed that the poorest women of the locality, having finished their domestic duties for the day, sat in the doors of their houses or walked through the village occupying their time in making braids of coarse straws, while others sewed the braids into the form of hats. He at once saw that if he could substitute for this kind of straw a fine, clean straw of flexible nature he could open an enormous trade with other countries. He tried four years consecutively to get a favorable result, taking advantage of every kind of grass, but to no great advantage, until finally he sowed some wheat brought from Egypt, with a view of caring for the straw only, and was rewarded with better success. The next year he hired a large tract of land and sowed the wheat very thickly, so that the stalks would grow slowly. These stalks, on being dried, were consigned to the best workingwomen, and much to the surprise of the whole district the hats made from this straw were most beautiful, and were sold at Leghorn for exportation (whence originated the name of "Leghorn hats," though not one straw hat is made in that city).

*Seed.*—There are three varieties of wheat of the golden plant ("pianta dalle fila d'oro"), as straw is called in Tuscany. The 1st is called Pontedera's semone (big seed), which produces the best straw for hats; 2d, Marzuolo, common quality; 3d, Santa Fiora, which is only used for pedals and braids. The Pontedera's semone is sown in arid soil, while the other two varieties require that more fertile. Seed is sown in November and December, according to the season, the object being to have the grain well up before the heavy frosts come, in the proportion of 11 hectoliters to each hectare, i. e., about 12½ bushels to the acre. The wheat is sown as thickly as possible, in order that the growth of the plant may be so impoverished as to produce a thin stalk, at the same time having towards the end, from the last knot, the lightest and longest straw.

*Soil required.*—Side hills with a gravelly soil and high meadow lands that have had a surface plowing and rough harrowing are specially adapted to the straw culture. Low swampy ground should be avoided, as dampness when the stalk is well grown renders the straw discolored and coarse.

*Preparation of soil.*—The ground in Tuscany is plowed or dug up in June and left in this condition until November, when the soil is again turned up, at which time it is ready for the sowing.

*Fertilizers.*—If the soil is very poor and thin a very light surface covering of manure is advantageous, otherwise it is better not to use anything, as too much manure would render the stalk thin and brittle.



*Care during growth.*—No care is necessary.

*Plant blooms ; relation between time of blooming and harvesting ; collecting ; when ; how.*—The wheat blooms at the end of May or at the beginning of June. It is pulled out by hand, by the roots, when the grain is half developed. If allowed to remain in the ground a longer time the straw would become brittle. For uprooting the straw, fine, continued sunny weather is selected, for the straw half dry on the field would be blemished in an infinite manner by even a little rain, by rendering the color dark. About five dozens uprooted branches, the size of the compress of two hands, are firmly tied together into little sheaves.

*Treatment of crop after collecting ; how dried ; how bleached.*—Each sheaf or menata, as it is called, is spread out in the shape of a fan to dry in the sun from three to five days, after which it is safely stowed away in barns. The harvest being over and the fields being only in stubble, the straw is again spread out to catch the heavy summer dews and to bleach in the sun for four or five days, but not all the crop at the same time, for fear of a sudden rain, and during which process it is carefully turned until all sides are equally white. Formerly the yellow color of the straw was preferred, but now the extra white is more sought after. Of course inferior-colored straws can be rendered more white by the use of chemicals in bleaching; but, if a white color can be reached through the action of nature, the straw becomes more pliable and beautiful, and lasts longer than when a chemical process is undergone.

*Disposition of crop ; where worked up ; how.*—The following are the various processes to which straw is submitted before being ready to be made up into braids, hats, and ornaments, viz, additional bleaching, fastening in small bundles, and classifying. The straw is then cut close above the first joint from the top, and again tied up in small bundles containing about sixty stalks in each. These small sheaves are then submerged in clear water for four or five minutes, and as soon as they become partially dried are submitted to the action of burnt sulphur in the proportions of one pound to one hundred bundles of straw for three or four nights in rooms adapted for the purpose; during the day the doors of these rooms are left opened.

The classification of the straw is made according to length and color, the ear or end of the stalk having been previously cut off. All the straw below the first knot is used simply for forage or bedding, as it is worthless for the purpose of making braids or hats. A mechanic in Prato has just invented a machine, worked by steam, for classifying the length and size of straw, which has proved a very great saving of time, and simplifying the labor which has been hitherto performed by hand. There is only one machine of this improved pattern in use in Tuscany, and Messrs. Fyfe, Sons & Co., of Prato, who are the largest straw exporters through this consulate, and to whom this machine belongs, report that a very great saving occurs from its use. The other large manufacturers and exporters throughout this district use only crude machines of wood, while the smaller dealers classify by hand.

*In families or factories (worked up).*—There are no factories for working up straw; but in almost every private dwelling of the lower classes will be found one or more of the female inmates attending to her domestic duties and at the same time making braids and sewing on hats. A ready sale is found for their work at the nearest market or trading house, though in many instances special contracts are made by the fattorino (straw brokers) with the workwomen directly, they supplying the straws into which the braids are made up.

Many women make from 28 to 34 yards of braids per diem, and some

can finish in a day 60 yards of common braids, but fine braids require very great care and cleanliness. One dexterous woman can make braids for a dozen of the coarsest hats in a day, but the time consumed depends upon the quality of the straw and the fineness required for the hat. Owing to the great strain upon the eyes, the finer kind of braids can only be worked upon from two to three hours each day; consequently it takes a woman from 4 to 5 days to make braid sufficient for the hats usually worn by gentlemen, while for the superior Leghorn hats for ladies, it requires from 5 to 9 months for each hat, and I have seen hats of such fine workmanship that it has taken in one instance 15 months, and in two others from 11 to 13 months to make them. The price of these hats range from 300 to 500 francs each. It is a noticeable fact that in several districts where the finer hats are made the workwomen suffer greatly from affection of the eyes, caused by too close application to this kind of labor.

Fashioning consists in washing with lye or potash, smoking with sulphur, binding and equalling threads, glazing, and ironing. The pressing requires three different machines, one for the plain, another for the sides, and a third for the brim, although formerly but one wood machine was used for such work, but now these have been replaced by improved machinery.

*Value of the straw before and after bleaching.*—There are very few transactions made in straw before bleaching, when the prices range from 90 cents to \$1.35 per 100 pounds. When bleached, this same straw is worth from \$9.60 to \$13.50 per 100 pounds.

*Cost of labor.*—Between the years 1822 and 1826 workingwomen who were clever in making braids realized from \$1.50 to \$1.75 per day, while at the present time the best braid-makers and hat-sewers make from 10 to 20 cents a day.

*Cost of producing; value of seed.*—Land suited for raising the best straw can be rented for about \$38 a hectare per year, but after several crops are grown upon it, the soil becomes very much impoverished, and requires a great deal of manuring before any other crop can be raised. A hectare (2.47 acres) should produce, on an average, 22,000 small sheaves of straw, which, at the usual market price, would be worth \$255, but after deducting all the expenses of rent of ground, taxes, cost of seed, labor, bleaching, &c., it would give but a net profit of \$60. The straw, bleached and untwisted and ready to be worked up, which can be obtained from such quantity of rough straw, is calculated at about 300 kilos (660 pounds), and the codini (refuse straw) remaining would be about 18,000 kilos (39,000 pounds).

The cost of seed is \$3.10 a bushel, being one-third more than the price demanded for the best wheat for milling purposes.

*General remarks.*—The better known straw centers are Brozzi, Signa, Prato, Fiesole, the Casentino, the Bolognese, and the Modenese. Information contained in McCulloch's Commercial Dictionary, edited in London, 1850, as to straw hats, says: "The Brozzi made bears the highest repute, and the Signa is considered secondary." The Province of Casentino is one of the most industrious in Tuscany (the straw there is gathered, but after maturity, and therefore of inferior color, although hats made are stronger), producing from 300,000 to 400,000 hats yearly, all for exportation. These hats, rather unknown in the past, are very much sought after for their strength and cheapness, prices varying from 5 to 20 cents each.

In the Bolognese, the straw manufacture is confined especially to the mountain districts along the base of the Apennines, where the inhabitants of 17 parishes are engaged in the making of cheaper and coarser

kind. Laino and Searicalasino are the center of this trade. Bolognese hats are brought to Florence to be fashioned, and the price paid is from 40 to 50 cents per dozen, and to the amount of 120,000 dozen yearly.

The ancient city of Fiesole used to have a large trade in braids made of straw, human hair, and silk threads combined, but now this kind of braid has entirely disappeared from the market, though occasionally a hat made of this material can be seen in use by some of the *contadini*. Some foreign merchants introduced a new style of braid, consisting of 11 threads, for making hats by superadded wires, but it was soon found that the 13-thread braid, knitted so ingeniously by the Tuscan women, was far superior, consequently this style was soon discarded. A very beautiful hat is made by the Tuscan women, consisting of 13 threads, in the style of Tyrolian hats, but of late these hats have been substituted by those of 5 threads, which resemble very much the Panama hat; that is the only kind of foreign straw hats that compare at all with those made in Tuscany.

The 5-thread braids, when made up into a hat, have all the appearance of the closely and more expensively made Panama.

Straw is also used in the making of fancy articles, such as slippers, caps, purses, fans, &c.

Rye straw, which grows very well in the mountainous part of Tuscany, has been occasionally used in the manufacture of hats, but as the straw is very brittle and easily discolors, the manufacture of these hats has been given up. In 1836, a hat made of this rye straw, consisting of 125 wires, was sold to a member of the court at Vienna for the price of 1,400 francs.

The first large exportation of straw hats from Tuscany to America was made in 1822, and from that time up to the present the trade has been steadily increasing. The export is not confined to the principal markets of Europe and United States; for several years Tuscan straw hats of both the coarser and finer qualities have been sent to the East and West Indies, China, and Australia.

For the last thirty years the annual exportation from Tuscany of straw goods amounted to 12,000,000 lire, 5,500,000 lire of which were exported through this consulate to the United States during the year 1878. By a comparison of the three principal products annually exported from Tuscany, straw goods bear a value of 12,000,000 lire, silk 5,000,000 lire, and timber 4,000,000 lire.

I have been engaged in making up the details for the above report for five months, and have visited many of the principal straw districts and manufactories during this time, and I take great pleasure in acknowledging the practical information derived and courtesies extended to both Mr. Bernardiz, my private secretary, and myself, at the hands of Messrs. Fyfe, Sons & Co., of Prato, Cav. G. Scaffai, of Signa, and Cav. A. Kubli, of Ponte all' Asso, and others engaged in the straw trade.

### 3.—HOW AMERICAN PATRONS OF ART ARE DEFRAUDED IN ITALY.

For the information of the Department, I inclose herewith copies of a brief correspondence which has recently passed between myself and Mr. R. W. Spranger, of this city, who is one of the most active and intelligent members of the Society of Artists in Tuscany.

During my residence here in the city of Florence for nearly three years, I have had reason to know that most of the merchants and many artists have demanded from and received of American and other foreigners higher prices for their articles of merchandise and works of art, simply to cover the dishonest demands of the couriers, referred to in this correspondence, and I trust that my attempt to break up this evil and protect the interests of my countrymen, both artist and purchaser, will meet the approval of the Department.

[Inclosure 1.]

*Consul Crosby to Mr. Spranger.*

UNITED STATES CONSULATE,  
*Florence, April 20, 1879.*

DEAR SIR: I received the letter of Signor Metzger last night and that of yourself this morning, relating to the complaint made by a personal friend in your presence yesterday, regarding his purchase of paintings a few months since at the "Società Artistica." I am sure that he does not base his complaint so much upon the prices not being fixed, as per your catalogue (for we all know that most mercantile transactions are subject to special bargains), as he does the fact that his courier had been treated as a commissionaire, and, as such, received a certain reduction on the prices paid by him to the Società; whereas his courier is simply employed by him in a very different capacity, and when reductions are made on any purchase he should have the benefit of it, and not the servant.

The custom prevalent, not only in Florence, but in most continental cities, of merchants, dealers, and artists paying couriers and valets de place a certain commission on all purchases made by any member of a foreign family, with whom at the time they may be employed, and for which employment they usually receive generous wages, is much to be deplored, for certainly an evil of this kind acts with double severity against the vendor as well as the buyer, for oftentimes prices are demanded on a higher scale, based upon the knowledge possessed by the party making the sale that one of these valets or couriers will, after he has returned to the hotel where the family by whom he is employed are stopping, return immediately and demand as his share of profit in the bargain from 5 to 15 per cent., and should his dishonest demands be refused, he at once threatens that he will prevent any other family that he may be with in the future from making any purchases of the same person. Consequently the merchant or artist who has passed through this blackmailing experience naturally raises the prices for his merchandise or works of art in order to satisfy the unnatural appetite of these professional-courier cormorants, compelling the purchaser to pay that much more out of his own pocket and oftentimes thereby causing a dissatisfied feeling between the principals.

It is a well-known fact that certain artists who have had the courage to resist the demands for commissions from these couriers have suffered materially thereby, owing to a combination on the part of this fraternity, who have used every means in their power to prevent the families with whom they are traveling from entering the studios of these artists or even purchasing any of their works.

I can answer you that it would be a most important step in the right direction should the gentlemen connected with the Società Artistica, in common with the various merchants and artists throughout Tuscany, hold a meeting and pass resolutions condemning the whole courier system of extortion, pledging themselves in the future not to pay any commission to couriers or valets de place, and reporting to the employer any demand made by a courier for a commission, and assuring the traveling public of this decision through the columns of several of the most important journals. The result of such a decided action on their part would be to eradicate this growing evil, which already has assumed such proportions as to influence almost every mercantile transaction connected with art and merchandise, and at the same time give more confidence to the purchasing public in showing them that the amount of the bills presented by the merchant and artist is a truthful statement of the sum actually received by them.

I will not only consider it a duty, but a pleasure, in giving you any assistance in my power in securing for the benefit of my countrymen a so much needed reform.

I am, dear sir, respectfully, your obedient servant,

J. SCHUYLER CROSBY,  
*United States Consul.*

R. W. SPRANGER, Esq.,  
*President of the Società Artistica, Florence.*

[Inclosure 2.]

*Mr. Spranger to Consul Crosby.*SOCIETÀ ARTISTICA,  
*Florence, 18 Viale Principe Amedeo, April 24, 1879.*

DEAR SIR: I will aid with pleasure any movement which will mitigate the abuse mentioned in your favor of the 20th instant. If you would allow me to publish part of your letter I think it would do good, and if you will use your high social, as well as official, position as an arm against it, both buyers and sellers will have cause to be heartily grateful to you. There are, however, many difficulties in attempting to shake off this firmly established imposition, viz, untiring enmity and probable ruin to any dealer who perseveres in it. If a league were formed against it the many would continue the old system underhand to the destruction and at the expense of the few who were sincere. No dealer but will say that he knows the abuse exists, and that all conform to it except himself. On the other hand, many travelers who are aware of the practice will maintain that their particular courier never accepts blackmail of any sort. If it is enraging to travelers to think the people they employ receive money on what is bought, it is also hard on those who are obliged to pay the same.

I believe the best that vendors can do is to have a priced catalogue, for then it is to their manifest advantage to price as low as they can to entice purchasers, and they also place it palpably out of their power to add to their prices at the sight of a courier. But it is from the traveling public the real reform must come, and if those who have couriers will make their purchases without their presence or knowledge (a most difficult thing) this evil would decrease; or else if, when they intended purchasing, they would do as some friends of mine do, travel with a good servant only and Baedeker's Guide-Book, and trust to their own taste and knowledge in their purchases, ignoring what interested persons and understrappers may tell them.

I beg to remain, dear sir, faithfully yours,

ROBT. W. SPRANGER.

Col. SCHUYLER CROSBY,  
*Consul of the United States at Florence.*

#### 4.—BORAX AS A SUBSTITUTE FOR SALT FOR THE PRESERVATION OF BUTTER.

A number of experiments have been made at the agricultural station of Florence, under the immediate supervision of Prof. Emilio Bechi, in substituting borax for salt in the preservation of butter. As the success of these experiments has been complete, and the advantages of this plan for the preservation of butter is most clearly shown, I deem it important to make the following report to the Department of State, for the benefit of our agriculturists at home. I am indebted to Prof. Bechi for his courteous, prompt, and full reply to my inquiries on the subject.

##### BORAX AS A PRESERVATIVE OF BUTTER.

The opinion has been entertained by the farmers and exporters of butter of Tuscany and Lombardy that the bad flavor often acquired by butter shipped to foreign countries was derived from the salt used in its preservation. Some impurities exist in salt, and especially chlorides of lime and magnesia, and they may give bad flavor to the butter.

But the analysis made of the salt used in Lombardy shows that it is quite as pure as the salt used in Germany or elsewhere, consequently salt alone could not be the principal cause of good butter becoming bad. The antiseptic virtues of borax being well known, as well as the experiments to preserve meat and other edibles by its aid, it occurred that it might be substituted in butter in place of the common salt. On trial it was found not to change in the least the flavor of the butter, and indeed preserved it admirably. But some of the farmers of Lombardy did not

concur in this opinion. Great care must be taken to have perfectly pure borax, and particularly that it shall not contain any carbonate of soda or alum. It is necessary also to have the borax reduced to a fine powder, and thoroughly mixed with the butter in the same proportion as when common salt is used.

The experiments made at the agrarian station of Florence, and also at the one of Caseificio, near Lodi, have given good results after repeated trials. Doubts, however, arose with reference to the physiological action of the borax, as some people thought it a noxious substance. Mr. Cyon reported to the French Academy on November 25, 1878, that borax could be added to food in the proportion of 12 grammes daily without being pernicious; and furthermore, by substituting it for marine salt, it would assist its assimilation. On the contrary, Mr. G. Le Bon stated to the French Academy on December 9, 1878, that borax frequently taken, even in very small quantities, was injurious, and ought not to be used even for the preservation of meats, &c. To this Mr. E. Cyon replied on December 30, 1878, insisting upon the innocuous qualities of borax. But Mr. G. Le Bon reiterated his opinion as to the bad consequences of using it for the above purpose.

With this difference of scientific opinion, great circumspection was necessary in adopting the use of a substance which might be very pernicious to health even if taken in very small doses. At this juncture Prof. Emilio Bechi, director of the agrarian station in Florence, made an important discovery, which throws some light on the question. For a long time Professor Bechi had been occupied in studying the borax mines in Tuscany, and has discovered and analyzed some new borax minerals, one of which Professor Dana, of New Haven, called in his honor Bechilite. Several reports on the borax deposits have been presented recently to the academy of the "Limei" at Rome by its president, Quintino Sella. One by Professor Bechi was read at the academy on the 4th instant, stating the presence of borax in very many of the rocks and in the mineral waters of Montecatini; also in the wells of Florence, in the ashes of plants, and in the air itself. From this fact Professor Bechi argues that neither borax nor boracic acid, in very small quantities, however often taken, would do injury, and that it may be used for the preservation of butter or meats with entire safety.

For his family use Professor Bechi prepares his own butter in the following way: By heat he evaporates the water of crystallization; then he reduces the borax to finest powder, and adds it to the butter in the proportion of 6 parts of the former to 100 of the latter, thoroughly and equally intermixed. It is then put into the same sort of jars as are used for salted butter. His method is simply substituting borax for salt. For daily family use he finds that butter keeps fresh in water which contains only 3 per cent. of borax. Still he admits, although his own experience shows that borax thus used is innocuous, there are others who disbelieve in his conclusions. Further, he thinks it might be effectively employed in destroying the phylloxera on the vines, but has made no experiments as yet in that direction.

---

## 5.—PRODUCTION AND CONSUMPTION OF SALT IN ITALY.

I have the honor to submit the following information connected with the production and consumption of salt throughout the kingdom of Italy. These facts have been gleaned from an article that appeared

some time since in the "Gazetta d'Italia" and also from other official data on this important industry. I am indebted to Mr. Huntington, the vice-consul, for his valuable assistance.

#### SALT.

The manner of preparation and places of production of marine salt are known to but few people. By chemical analysis it is shown that salt is composed of chloride of sodium; medical researches give the total quantity of salt in the human body as a little less than a kilo (about 2½ pounds), and as every day a certain quantity is lost, it is natural that the renewal of this material becomes necessary, and that to replace this loss a certain quantity of salt should be consumed with the food. This fact is recognized by all breeders of cattle, who are in the habit of using salt in their food, to the great bettering of their condition. Marine salt is also used with great advantage in the industries and furnishes the raw material for the manufacture of soda, so much used in commerce, and also serves in the preparation of soap, alum, and a hundred other products. In almost all countries the preparation and sale of salt is a government monopoly, which is exercised either by increasing the price of the raw material or by heavy taxes on its manufacture. The industry of the preparation of sea-salt in Italy is in a most flourishing condition, as in addition to supplying the wants of the Italian people themselves there is annually exported about 150,000 tons. The products of Sardinia and Sicily are not included in these calculations, as in these islands there exists no government monopoly, and from them are exported annually about a million quintals of salt. The price of production of common salt averages 15 lire the ton, but by the time it arrives in the various places of its retail sale, owing to cost of transportation and handling, it costs 50 lire, while the government realize 50 lire the ton, the profit, therefore, amounting to 68,000,000 lire annually. The places of production of salt in Italy are eleven, almost all government property. A part are let to private industry, while five are managed directly by the State; the former are found at Cagliari, Convecchio, Volterra, Salso Maggiore (Parma), San Felice (Venice), and Trapani; the latter at Margherita Savoy (Barletta), Corneto (Rome), Cervia (Ravenna), Lungro (Cosenza), and Portoferraio.

In regard to the production of salt it is divided into three classes: mineral, artificial, and natural. The first is its extraction from solid material by mechanical means; the second, by evaporation of salt-water by fire, and the last the natural evaporation of the sun. Subjoined is a detailed account of the various processes.

*Marine salt.*—Sea-water contains about three per cent. in weight of chloride of soda in solution. If all the water is evaporated there will remain at the bottom the pure salt. To hasten this evaporation and produce a good article of natural salt is the object of artificial salt production. In order to hasten this process a large expanse of level ground close to the sea, and as near as possible to the sea-level, is selected. Inclosed by high dikes to prevent flooding from high seas or storms, the surface is subdivided into numerous levels, separated by little banks, as is practiced in the cultivation of rice. The entire extent of the salt farms is in communication with the sea by means of a canal which serves for the ingress of the sea-water and the egress of the rainwater, and sometimes hydraulic pressure is used to empty or fill the basin. Numerous lines of canals and ditches run in several directions through the extent of the evaporating-ground, and it is by these that the water is

guided through the different levels. In April the rays of the sun begin to gain force and the equinoctial storms have by this time passed; the damages of the past winter are then repaired and the rainwater that may have collected is pumped out generally by hydraulic elevators, worked by centrifugal force. The rainwater having been ejected, the canal to the sea lets in the salt-water, which should cover the ground to the depth of about 5 centimeters. The various levels of the salt-farm should be of a difference of about 7 centimeters, one above the other, so that the water may circulate slowly and freely over the whole expanse. To regulate these levels is the most difficult work of the engineer. The water, exposed to the rays of the sun and under the influence of the wind, evaporates, and as it diminishes in volume it increases in density, and it is to facilitate this process that the salt-farm is constructed and the water passed from one level to another until it has acquired the desired density, after which it is reunited in deep reservoirs.

This process many times repeated lasts all through the month of May. In the month of June the real work of manipulating the water for the production of salt begins. The water collected in the reservoir, and showing  $15^{\circ}$  to  $20^{\circ}$  Baumé of density, is pumped out into other large flat reservoirs until by evaporation it acquires  $25^{\circ}$  of density. It is then spread over the salt-producing portion of the farm in extensive reservoirs of from 5,000 to 10,000 square meters to the depth of 5 centimeters. The evaporation by the sun and wind concentrates the water and causes the salt to be deposited. Small points are seen forming in the water, which enlarge into crystals and sink to the bottom, where they increase by the addition of other crystals. This process is slow and continuous when not interfered with by extraneous causes. The salt-reservoirs keep this large, flat expanse continually filled with water to the depth of 5 centimeters. The earth at the bottom begins to whiten and a crust of deposits is found at the bottom of the water, which augments day by day, until by the month of August it becomes from 5 to 8 centimeters thick. It is then prudent to gather the crop, as a rain-storm would destroy a portion of it. The superficial water is now drawn off, leaving a deposit of salt, which is of a pure white and shiny like crystallized snow. The workmen then enter the salt-farm and with hoes, picks, and shovels separate the crust of salt from the earth and carry it off to the magazines in sacks, barrels, and carts. This work lasts more than a month, sometimes continuing into September, and it is necessary to employ an additional amount of labor, as a change of weather would have injurious results in the harvest of the salt. During all September and a great part of October the soil of the reservoirs is washed out and the water deposited in deep reservoirs, where it remains until the next year; the crystals that have formed, however, are filled with impurities and have to be subjected to the action of rainwater during the winter before they become salable.

*Artificial evaporation.*—The principle that regulates the production of salt by artificial means is the same, but the manner of producing it is quite different, as the expensive process of reduction by fire is adopted. In various parts of Italy, at different depths, are found layers of salt evidently deposited at remote periods in strata or mixed with heterogeneous materials. In all the wells in these localities the water is strongly impregnated with salt. The only two places in Italy where salt is worked by artificial means are Volterra and Salso Maggiore, the former having wells 40 meters deep, often connected by underground galleries, and the latter an artesian well of the depth of 300 meters. The water, on being pumped out, is deposited in large reservoirs and



afterwards condensed in open boilers of many square meters surface, under which fires are continually kept burning. The advantage of this system is its practicability at all seasons and its independence of the weather, but the production of salt is much more expensive. The salt deposited and scraped up from the bottom of the boilers is of the whitest quality, but less granulated than the sea-salt, and is sold throughout Tuscany, and in other places, at the price of that passed through the mill. The salt-wells of Volterra produce annually more than 100,000 quintals, and those of Salso Maggiore a few thousand only. The salt of Volterra, for its pure quality, is mostly used for table purposes.

*Salt-mines*—There are such works at Lungro, in Calabria, which employ 400 hands. The deposits are found in strata slightly mixed with extraneous matter of various formations, horizontal, perpendicular, and often in caves or pockets. This mine dates from ancient times, and has been often abandoned, but now under a good practical engineer is paying very well. The mine is situated at the bottom of a valley about 300 meters above the level of the sea, and is entered by a small aperture of about 3 square meters in the side of the Apennines. This tunnel, after a short distance, communicates with a subterranean gallery that descends by easy gradations and steps to the depth of 200 meters; connecting galleries and drifts lead in every direction, and the salt is extracted by blasting and then broken up into fragments of convenient size for portage. This mine produces 60,000 quintals annually, which is principally consumed in Calabria and the Basilicata. The salt is compact, pure, and white, like chalk, and translucent.

The largest salt-works in Italy are those of Cagliari, which are leased to a French company, and produce annually more than 130,000 tons of salt at an enormous profit. One half of the product goes to Piedmont, Lombardy, and Liguria, and the balance is exported to foreign countries. On the coast between Marsala and Trapani, in Sicily, there are many private salt-farms, and, as no government monopoly exists, any one is at liberty to cultivate this industry on his own lands. The salt-farms of Trapani furnish Rome, Naples, and Venice, and besides, export annually about 60,000 tons.

Convecchio and San Felice produce together 15,000 tons of salt, and are both leased, the one to the Marquis of Mazzaeorati and the other to Baron Rothschild. They furnish salt in part to Venice, the Marches, and the Romagna. The two salt-springs of artificial evaporation, Volterra and Salso Maggiore, produce annually about 10,000 tons, and supply nearly all Tuscany and Parmigiano. Of the salt-springs administered by the state, first in importance is that of Margherita, of Savoy (Barletta), producing 30,000 tons; Lungro, producing 6,000 tons; Portoferraio, 2,500 tons; Cervia, 8,000 tons; and Corneto, 6,000 tons. They are worked by a special body of technical employés that serve under the minister of finances. Since 1870 a complete reorganization has taken place in the management of this industry, producing good results. In 1877 the sale of salt in Italy was as follows:

	Lire.
Common salt, comprising that used for industrial purposes, at 35 lire the quintal .....	1, 350, 952 15
Ground salt, at 66 lire the quintal .....	117, 944 44
Refined salt, at 76 lire the quintal .....	4, 396 24
Salt for agricultural purposes, at 12 lire .....	83, 239 22
Total .....	1, 556, 532 06

The sum of 80,420,205.47 lire was received from the sale of salt, from which deducting the expenses, 13,579,242.18 lire, leaves a net profit of

67,036,924.14 lire. These figures show, in the consumption of salt, an average of over two and three-quarters lire to each person in Italy.

Sailing vessels coming to the Mediterranean and failing to procure new charters for the United States usually call in at Cagliari and fill up with salt, rather than return home in ballast.

The amount of marine salt exported from the district of Cagliari to the United States for the last three quarters of 1878, according to the United States consular agent reports, amounted to 101,785 Italian lire.

---

## 6.—STEEL RAILS IN ITALY.

In view of the fact that so much capital in the United States is invested in the manufacture of steel rails and other railway materials, and our principal roads are replacing the iron with steel rails, the following information may not be unimportant, especially as it is derived from a very careful inquiry into the subject, and from the best railway authority and agents of European manufacturers in Italy:

The three most important railway companies in Italy, "Ferrovie Alta Italia," "Strade Ferrate Romane," "Strade Ferrate Meridionali," have decided within the past five years to adopt steel rails, and mostly steel fish-plates.

A series of trials have been made to ascertain the form which renders the best result in fishing rails, and it has generally been considered that the angle fish-plates, supporting suspended joints, preserve the line in the most solid state.

The Meridionali railway has been adopting, with very good results, rails 12 meters long, which reduces the cost of fish-plates, bolts, &c. Of course the angle fish-plates, weighing about 9 kilos (19.845 pounds), are heavier than the ordinary plain ones, but they certainly give greater sustenance to the joints, and help to secure a smoother track; the results in Italy are very encouraging. The prices for steel rails have been lately exceedingly low, averaging little more than £6 sterling per ton, delivered free on board at Italian ports.

Certain large Sheffield manufacturers of steel rails, such as Brown, Bagley, and Dixon, and others who have heretofore furnished most of the steel rails for Italy, have not quoted such low figures, preferring to keep up their old standard of quality and price, but it is the German and Belgian firms that have quoted the extreme prices, being so hungry for orders that, as they themselves aver, they tender below cost price to secure work for their mills in preference to closing them. It is the opinion of those best able to judge that the means of production in the steel trade have been so much augmented that the requirements in Europe, and in other countries outside of the United States, will be for some years much too small to give anything like full employment to the bulk of the works. A fair estimate may be easily obtained of the quantity of steel material required in Europe during the next few years by the Department acquiring from each country an approximation of its consumption. Italy, for example, will probably purchase some 40,000 tons of steel rails per annum during the next five years; France, Germany, Belgium, and England can produce far more than they are actually using. The French railways only bought last year from their native manufacturers about 137,000 tons of steel rails, so that a moment's consideration will show the means of production in Europe is far beyond the presumable demand. It is consequently to be deduced that the depression

which has existed in the metallurgical trade during the last three years will not be removed for some time to come.

The fuel for locomotives used here is for the most part the manufactured briquettes, composed of hard and soft coal and a sufficient proportion of tar. The combustion of this fuel requires, of course, careful and constant attention, and as the engine drivers unfortunately do not devote themselves to it, a greater amount of smoke attends traveling in Italy than elsewhere, where these briquettes are not used, not to mention also the loss in proportion of caloric power. On some of the freight engines lignite is alone employed.

The German and Belgian railway material manufacturers still keep a strong hold on the trade in Italy. Prices have ranged exceedingly low during the year, and steel rails have been sold at a little above £6 per ton, free on board at Italian ports; this is a remarkable contrast with the rule of some £20 per ton of four years ago. The South Italian Railway Company has put down a considerable quantity of steel rails 12 meters long (about 40 feet), and the results of a sufficiently extended experience have been favorable. Probably this length will be fixed as the normal one, as it gives a more solid track, and saves, of course, a large proportion of fish-plates and bolts. The system of fishing generally adopted is by stout angle fish-plates of steel supporting suspended joints. I think there is a solid and smooth track on the most important parts of the Italian railways now, owing to the great improvements adopted during the last four years in the way of steel rails and angle steel fish-plates.

One of the principal reasons, I believe, of the continued success of the German and Belgian firms in securing contracts in railway material is, that they have foreseen more clearly than most of the English manufacturers that the general demand for such material in Europe would remain far below the means of the total productive power of the several manufacturing countries. I have certainly found that the rapid decline in prices has been led by the Germans and Belgians, and now they can export from Antwerp and Rotterdam at rates as low, and sometimes lower, than the English get from their most busy ports; for instance, I may mention that a short time ago a parcel of 10,000 steel rails was shipped from Antwerp to Italy at the exceptionally low freight of 10s. per ton. It has been supposed, and in fact freely stated by the Germans themselves, that they have taken many contracts at a loss, but, however this may be, railway material makers must realize the disagreeable fact that they have from henceforth, whether the trade is good or bad, to compete with foreign rivals content with small profits, holding freer hands over their workmen, and who have at the head of each department engineers educated in technical colleges and backed by sufficient capital.

One of the largest steel-rail manufacturers of Sheffield, England, in reply to some inquiries made by me on this subject, attempts to explain that one of the main causes of their not being able to compete successfully with German and Belgian firms engaged in the same trade is the high rates of freight from Sheffield to the shipping ports, and says:

Regarding Sheffield, I may repeat what I wrote you before, viz, that as long as the rate of carriage to and from Hull or Goole, on heavy goods, remains as high as it is, we shall stand at an enormous disadvantage in our competition with other places. I would humbly suggest the board of trade should appoint an engineer to work in conjunction with the Sheffield chamber of commerce for the purpose of ascertaining in what manner this very important manufacturing center could be placed in connection with the sea at the lowest rates, such rates, I mean, as our German and Belgian rivals enjoy for much greater distances than 33½ miles to Goole or 70-odd to Hull. Perhaps if the actual water way between Sheffield and the sea were worked on the principles

advocated lately by Mr. Theophile Finet in his book on the "Exploitations des canaux and voies navigables," (Brussels), a great economy would be effected. Mr. Finet states that all important canals should be managed on the same principle as a railway company, that is, be owned and worked by the same persons having "trains" of boats with small steamers leading them by a cable attached to the bottom of the canal, as is done with many canals on the continent, where every means are used to effect economy both for carrying goods down to the port and taking ore to the works. If some such plan were carried out I believe that Sheffield would soon enjoy a rate of 3s. to 3s. 6d., instead of as at present more than double that freight. Something should be done at once while we have still got hold of the trade and not when we have been pushed out of it.

By the foregoing it will be seen that the English manufacturers are seriously alarmed at the enterprise shown of late by their continental neighbors. The last locomotives let in Italy were contracted for by a Bavarian firm at 1.20 frs. per kilo, equal to £48 per ton, which is, of course, a very low price.

## 7.—TARIFFS OF ITALY—GENERAL AND CONVENTIONAL.

I have the honor to forward for the information of the Department of State a table showing the duties levied on certain categories of goods entering Italy under the Italo-Austro-Hungarian tariff of December, 1878, as compared with those levied under the Italian general tariff of 1878, and also with the duties, chiefly conventional, previously in force.

By the commercial treaty with Austro-Hungary ninety-nine headings only of the three hundred and nine into which the Italian general tariff is divided are bound. The ratification of this treaty of commerce and the conclusion of the most favored nation bases between Italy and France and Italy and Switzerland will have the effect of preventing a war of general tariffs, which would otherwise have been inevitable.

From the report of the commission appointed to examine the treaty between Italy and Austria Hungary, taken together with those on the treaty between Italy and France which the French chamber rejected last year, and on the bill for the new general tariff which became law on the 30th of May last, it is clear what course Italian economists have decided will be the best for Italy to follow in the regulation of her commercial relations with other countries. *Reciprocity is the basis of their theory.*

The Italian general tariff of 1878 showed an increase of duty on the greater number of imports over previous rates, with the exception of certain raw materials required for Italian manufactures. All "ad valorem" duties were abolished, and this abolition has been carefully maintained in the new treaty. The question of the protectionist tendency of this tariff, which has been asserted and denied, need not be entered upon here. A principal object of its compilers, after reforming, and, if yarns and textile fabrics be excepted, generally simplifying the previous nomenclature and doing away with the additional décimes, has certainly been to hold the power of obtaining reductions of duty in favor of Italian exports to other countries, as is apparent from the rates leviable under the Italo-Austro-Hungarian tariff. These have fallen back on many articles to the duties previously paid, while on some there is a decrease of duty.

In the Italo-Austro-Hungarian Treaty the important category of cotton has been entirely omitted, and for manufactures of wool but three headings are included, on which the duties are as follows:

No. 32, *a.* Tissues of wool, carded, per 100 kilograms, 150 lire; *b.* tissues of wool carded, per 100 kilograms with cotton ways, 110 lire. No. 34. Made-up articles of wool, as the tissue, + 10 per cent.

Under the former conventional tariff tissues of wool paid 160 lire per 100 kilograms, or 10 per cent. Ad valorem duty is likely to press hardly on cheap and heavy dry goods, while the diminution of the specific duty will be in favor of the lighter and fine articles, but only in those cases where it is below the former 10 per cent. ad valorem duty. For made-up articles of wool there is in any case an increase of duty of 10 per cent., as under the former tariff these articles paid as the tissue of which they are made. The same remark applies to made-up articles of flax and hemp.

The category of iron and steel shows the following changes on the old tariff:

	Lire,
No. 56, c. Iron, cast, worked, planed .....	+ 0.40
No. 58, b. Iron in rods, 5 millimeters or less in diameter, and bars of all dimensions .....	- 0.10
No. 58, d. Iron in plates less than 4 millimeters in thickness .....	- 1.75
No. 59. Iron and steel forged in axle-trees .....	+ 0.07
No. 60. Iron and steel rails for railways .....	+ 1.85
No. 61. Iron works:	
a. Plain .....	+ 0.45
b. Fitted up with other metals .....	+ 0.15
No. 62. Tin plate:	
a. Not worked .....	+ 1.50
b. Worked .....	+ 1.00
No. 63. Steel:	
a. In bars, rods, and plates, according to size and thickness (regime of iron wire) .....	- 5.85 to - 9.23
c. Otherwise wrought .....	15.10
(Except in springs) .....	+ 1.90
No. 64:	
a. Scythes and reaping-hooks .....	+ 0.75
b. Tools, instruments, &c. ....	+ 2.75

It will be noticed that steel in rods, bars, plates, and steel wire now enjoy the regime of iron, by which a good diminution of duty has been obtained.

In machinery, fixed steam-engines pay the previous duty of 6 lire per 100 kilograms, with the advantage of including their boilers. There is an increase of 2 lire on the duty on agricultural, artistic, and industrial machines in general, and a diminution of 1 lira on machines for spinning textiles. Detached boilers, cylindrical and spherical, submit to an increase of 2 lire. Steel boilers enjoy a decrease of 4 lire on the previous rates of duty.

The chief diminution Italy has obtained in the import duties imposed by the Austrian general tariff, apart from what relates to the natural products of the soil (refers especially to this district of Tuscany), is upon the Tuscan straw manufactures, and a reduction of the duty on silk tissues of 300 lire per 100 kilograms to 200 lire. This reduction of the Austrian import duty on straw goods will have a tendency to increase the trade in that line of goods between this district and Austria, and in consequence will naturally have the effect of enhancing the values on straw hats and materials, and effect to some degree the American purchaser in this market.

In establishing her new general tariff with its increased rates, Italy has abolished the 10 per cent. war duty, the 5 per cent. forwarding dues, and the statistic rights, which vary according to locality, yielded about 1,500,000 lire annually.

In closing this report I beg to express my acknowledgments and thanks to Mr. Colnaghi, Her Britannic Majesty's consul, for valuable information and statistics furnished me.

J. SCHUYLER CROSBY.

Table showing the duties levied on goods entering Italy under the *Italo-Austro-Hungarian treaty*, as compared with the *Italian general tariff of 1878*, and the duties, chiefly conventional, previously levied.

Number.	Articles.	Treaty between Austria-Hungary and Italy December 27, 1878.		Italian general tariff, 1878.		Duties previous to promulgation of general tariff in 1878, chiefly conventional.		Difference between duties under present tariff and those levied under former treaties (before 1878).	
		<i>Italian lire.</i>	0. 50	<i>Italian lire.</i>	3. 00	<i>Italian lire.</i>	Free.	<i>Italian lire.</i>	+ 0. 50
1	Waters, mineral, natural, or artificial, including aërated waters.								
2	Wine:								
	a. In casks and barrels		5. 77		15. 00		*5. 77		
	b. In bottles.....per 100		18. 00		30. 00		17. 25		- 0. 75
3	Beers:								
	a. In casks and barrels		2. 00		15. 00		2. 00		
	b. In bottles.....per 100		2. 00		15. 00		2. 00		
4	Spirits:								
	a. Not sweetened or perfumed, in casks and barrels, per hectoliter		12. 00		25. 00		Of 22° and less... 5. 50		+ 6. 50
	b. Sweetened or perfumed		25. 00		50. 00		Above 22°.....10. 00		+ 2. 00
	c. Of all kinds, in bottles—						Compound.....15. 00		+ 10. 00
	1. Containing over $\frac{1}{4}$ a liter, but not more than 1 liter, per 100		25. 00		50. 00		Plain, in bottles not containing more than 1 liter.....10. 00		+ 15 or + 8, according to size of bottle.
	2. Containing $\frac{1}{4}$ a liter or less.....per 100		18. 00				Compound, in bottles not containing more than 1 liter.....15. 00		+ 10 or + 3, according to size of bottle.
5	Oils, fixed:								
	a. Olive oils.....per 100 kilos.		3. 00		6. 00		3. 00		
	b. Others.....do		6. 00		6. 00		6. 00		
6	Chicory, and every other substance that is substituted for coffee, ground or only roasted.....per 100 kilos		5. 00		10. 00		5. 00		
7	Lead, oxide of.....do		2. 00		2. 00		2. 00		+ 1. 25
8	Lead, carbonate of.....do		5. 00		5. 00		3. 75		+ 24. 00
9	Mercury, sulphuret of (vermillion).....do		25. 00		100. 00		1. 00		- 10. 00
10	Matches, wooden.....do		Free.		11. 00		Lucifer matches.....10. 00		
							Matches only sold in bulk.....Free.		
11	Herbs, flowers, leaves, lichens, and medicinal roots.....do		2. 00		2. 00		Herbs, &c.....2. 00		- 3. 00
12	Resins, European, raw.....do		1. 00		3. 00		Lichens.....1. 00		
13	Soaps:								
	a. Common.....do		6. 00		6. 00		6. 00		+ 6. 00
	b. Other.....do		12. 00		30. 00		6. 00		
14	Wax, sealing.....do		30. 00		30. 00		25. 00, or 10 per cent. ad valorem.....		Depending on value.
15	Woods, roots, bark, leaves, lichens, flowers, herbs, and fruits for dyeing and tanning, not ground.....per 100 kilos		Free.		Free.		Free.		

\* General tariff, including additional decimes equal to 15 per cent. on the duty.

Table showing the duties levied on goods entering Italy under the *Italo-Austro-Hungarian treaty, &c.*—Continued.

Number.	Articles.	Treaty between Austria-Hungary and Italy December 27, 1878.	Italian general tariff, 1878.	Duties previous to promulgation of general tariff in 1878, chiefly conventional.	Difference between duties under present tariff and those levied under former treaties (before 1878).
		<i>Italian lire.</i>	<i>Italian lire.</i>	<i>Italian lire.</i>	<i>Italian lire.</i>
16	Pencils: Without sheaths..... per 100 kilos.....	10.00	30.00	1.00	+ 9.00
	With sheaths..... do.....	30.00	Free.	57.50, or 10 per cent ad valorem.....	Depending on value.
17	Flax, hemp, and other vegetable fibers (except cotton and jute): a. Raw..... per 100 kilos.....	Free.	Free.	Free.	
18	b. Combed..... do.....	3.00	3.00	3.00	
19	Flax and hemp: Cordage and cables of, also tarred..... do.....	4.00	4.00	4.00	
20	Flax and hemp: Yarns of, single gray, washed or bleached..... do.....	11.50	Gray..... 11.00 to 60.00 Bleached, 14.33 to 78.00	11.50	
21	Yarns of, single dyed..... do.....	17.10	According to length, per kilo, 41.00 to 86.00	17.10	
22	Twists, gray, washed or bleached..... do.....	23.10	Gray..... 14.30 to 78.00 Bleached, 18.59 to 101.40	23.10	
23	Twists, dyed..... do.....	34.65	According to length, per kilo, 53.30 to 117.00	34.65	
24	Tissues of, plain, not containing more than 5 threads of warp in the space of 5 millimeters: a. Gray or bleached, other than for packing, per 100 kilos.....	23.10	Gray..... 20.00 to 110.00 Bleached, 28.00 to 148.00	23.10	
	b. For packing, straps and tubes..... do.....	12.00	Dyed or colored, 50.00 to 140.00 Printed, 86.00 to 203.00	10.00	+ 2.00
25	c. Dyed or woven with dyed yarns..... do.....	38.00	According to the number of threads, warp and woof, contained in a square of 5 millimeters per side.....	38.00	
26	Tissues of, containing more than 5 threads of warp in the space of 5 millimeters: a. Gray, white, or mixed with white..... per 100 kilos.....	57.75		57.75	
27	b. Dyed or woven mixed with dyed yarns..... do.....	90.00		90.00	
28	Tissues of, printed..... do.....	115.00		115.00	
	Tissues of, embroidered..... do.....	250.00	300.00	*287.50	- 37.50
29	Oil-cloths: a. For flooring, and tarred cloths..... do.....	20.00		*86.25, or 10 per cent ad valorem.....	Depending on value.
	b. All others..... do.....	40.00		As the tissue of which made.....	
	Flax and hemp: Hosiery and trimmings of..... do.....	110.00	110.00	Buttons, as the tissue of which made.....	
30	Buttons and ribbons of..... do.....	100.00	130.00	Ribbons, bleached or dyed..... 80.00 Ribbons of colored thread..... *115.00	+ 20.00

31	Made-up articles of (confections).....do.....	As the tissue, plus 10 } per cent.....	As the tissue.....	- 15.00
32	Wool, tissues of: a. Carded.....do.....	150.00 } 110.00 }	165.00 } 110.00 }	- 10.00 on specific duty. - 30.00 on specific duty.
33	Horse-hair, tissues of, for sleeves.....do.....	30.00 }	30.00 }	+ 5.00
34	Wool, made-up articles of (confections).....do.....	As the tissue, plus 10 } per cent.....	As the tissue.....	
35	Charcoal.....do.....	Free.	Free.	
36	Fire-wood.....do.....	Free.	Free.	
37	Timber: For cabinet-making, sawed.....do.....	4.00 }	4.00 }	- 9.50
38	In planks or in laid squares for flooring.....do.....	4.00 }	6.00 }	- 1.75
39	Common, in the rough, sawed, squared, or only hewn.....do.....	Free.	1.00 }	+ 1.25
40	Wood, split, for boxes, sieves, riddles, and the like, wood in hoops of all lengths.....do.....	Free.	1.00 }	+ 2.30
41	Furniture, unfinished: a. Of bent wood, polished or not, with or without cane bottoms (rattan).....do.....	7.50 }	20.00 }	Dependent on value.
42	b. Of common wood.....do.....	13.00 }	40.00 }	
43	Oars, stakes, and poles.....do.....	Free.	Free.	
44	Wood, common, utensils and other articles of: a. Neither polished nor painted.....do.....	Free.	8.00 }	Dependent on value.
45	b. Other.....do.....	8.00 }	8.00 }	Dependent on value.
46	Wood, small articles of ( <i>mercerie di legno</i> ), including children's wooden toys.....do.....	40.00 }	40.00 }	Dependent on value.
47	Carrriages for common roads: a. Two-wheeled.....each.....	33.00 }	33.00 }	
48	b. Four-wheeled, and with four springs.....do.....	10.00 }	110.00 }	
49	Basket-makers' works (wares).....do.....	Free.	5.50 }	(1) 8.00
50	Paste, of wood, straw, and similar substances.....do.....	Free.	Free.	
51	Paper: a. White or of colored paste, of all qualities.....do.....	10.00 }	10.00 }	
52	b. Colored, gilt, painted, and paper-hangings.....do.....	25.00 }	25.00 }	
53	c. Blotting and thick wrapping.....do.....	Free.	5.00 }	
54	Pasteboard: a. Common, of all kinds.....do.....	Free.	8.00 }	- 8.00
55	b. Fine, of all kinds.....do.....	8.00 }	8.00 }	

\* General tariff, additional duties included.



Table showing the duties levied on goods entering Italy under the *Italo-Austro-Hungarian treaty, &c.*—Continued.

Number.	Articles.	Treaty between Austria-Hungary and Italy December 27, 1878.		Italian general tariff, 1878.		Duties previous to promulgation of general tariff in 1878, chiefly conventional.		Difference between duties under present tariff and those levied under former treaties (before 1878).	
		Italian lire.		Italian lire.		Italian lire.		Italian lire.	
50	Books: Printed, not bound, or only sewed (brochures), per 100 kilos.	Free.		Free.		Sewed		+ 10.00	
51	Not printed (registers):					Bound in boards		+ 7.25	
	a. Sewed or in boards	10.00		10.00		100.00		+ 2.25	
	b. Bound in leather or parchment	15.00		35.00					
	c. Otherwise bound	100.00		100.00					
52	Hides and skins:								
	a. Raw, green, or dried, other than for furriery	Free.		Free.					
	b. Raw, green, or dried, for furriery	5.00		5.00					
	Saddlery, articles of, except harness and saddles	50.00		60.00					
54	Leather, articles of, tanned without hair, except gloves, shoes, valises, &c.	50.00		70.00					
55	Iron: Cast iron and steel, in scrap, filings, &c.	Free.		Free.					
56	Cast:								
	a. In pigs or masses	Free.		Free.					
	b. Worked in rough castings	4.00		4.00					
	c. Worked, planed, turned, tinned, enameled, or varnished, also fitted up with other metals, per 100 kilos	5.00		5.00					
57	Raw, in pigs, and steel, in ingots	2.00		2.00					
58	a. Rolled or hammered ( <i>lamie o martellate</i> ) rods, of more than 5 millimeters in diameter, and bars of all dimensions	4.62		Rods of more than 7 millimeters in diameter		4.62			
	b. In rods (including wire) having 5 millimeters or less in diameter or of side	8.00		Rods of 7 millimeters or less in diameter, 8.00		Rods of less than 7 millimeters in diameter, 8.10		- 0.10	
	c. In plates, 4 millimeters thick and above	4.62		4.62					
	d. In plates, less than 4 millimeters thick, and also in pipes	8.00		8.00					
59	Iron and steel: Forged into axletrees, anchors, anvils, or other rough works	7.00		7.00					
60	Rails for railways	3.00		3.00					
61	Iron of second fabrication (iron work):								
	a. Plain	11.80		11.80					
	b. Fitted up with other metals	14.00		14.00					
62	Thin-plate (sheets of iron covered with tin, zinc, or lead):								
	a. Not worked	10.75		10.75					
	b. Worked, also fitted up with other metals	16.00		16.00					

63	Steel:	Same as iron, according to dimensions.	Same as iron, according to dimensions.	Barr, rods, or scrap.		5.85 to 9.23, according to size and thickness.
				13.85	10.00	
64	a. In bars, rods, plates, and steel wire	do.	do.	Rolled, in sheets or plated, drawn, &c.		
	b. In springs, of all kinds	do.	15.00	For carriages and the like	23.10	- 15.10
	c. Otherwise wrought	do.	25.00			+ 1.90
	a. Scythes and reaping hooks	do.	10.00			+ 0.75
65	b. Tools and implements for arts, trades, and agriculture, of iron, of steel, and of iron and steel, per 100 kilos	do.	12.00			+ 2.75
	Nickel, and its alloys with copper and zinc:					
	a. In plates, cakes, and scrap	do.	4.00			
	b. In leaves, rods, and wire	do.	10.00			
66	c. Other works of	do.	60.00			
	Engines, steam:					
	a. Fixed, with or without boilers, and hydraulic motors.	do.	6.00			
	b. Locomotive (including tender), movable and marine, with or without boilers	do.	8.00			
67	c. Other machines, and detached pieces of machines	do.	6.00			
	Copper or other metals, apparatus of, for treating, refining, distilling, &c.	do.	10.00			
68	Boilers, detached, of iron and steel plates, with or without boiler-tubes and heaters	do.	8.00			
	Wagons:					
	a. For baggage and merchandise	do.	7.00			
	b. For passengers	do.	13.00			
70	Stone for building, rough, sawed, hewn, or polished, including statues	do.	Free.			
	Tiles, bricks, squares, or pipes of earthenware (terra-cotta)	do.	Free.			
	Clay, common, other articles of (crucibles, jars, stores)	do.	1.50			
	Porcelain, articles of, white	do.	12.00			
74	Glass or crystal, sheets of:					
	a. Not polished (dull), 4 millimeters or more in thickness, per 100 kilos	do.	8.75			
	b. Polished, not altered	do.	20.00			

\* General tariff, additional duties included.

Table showing the duties levied on goods entering Italy under the *Italo-Austro-Hungarian treaty*, &c.—Continued.

Number.	Articles.	Treaty between Austria-Hungary and Italy December 27, 1878.		Italian general tariff, 1878.		Duties previous to promulgation of general tariff in 1878, chiefly conventional.		Difference between duties under present tariff and those levied under former treaties (before 1878).	
		Italian lire.	Italian lire.	Italian lire.	Italian lire.	Italian lire.	Italian lire.		
75	Glass or crystal, sheets of, polished and silvered (including framed mirrors).....per 100 kilos	35. 00		50. 00	25. 00		+ 10. 0		
76	Glass and crystal, manufactures of: a. Only blown or molded, neither colored, nor engraved, nor cut.....per 100 kilos	7. 00		12. 00	12. 00		- 5. 00		
	b. Colored, cut, painted, enameled, gilt, or silvered.....do	11. 00		18. 00	15. 00		- 4. 00		
77	Glass, crystal, and enamel, in the shape of beads (conferre), or stones and prisms, for chandeliers and the like.....per 100 kilos	30. 00		50. 00	*37. 50		- 27. 50		
78	Starch.....do	3. 00		4. 00	1. 50		+ 1. 50		
79	Fruit, fresh, including grapes.....do	Free.	Fresh grapes.....7. 00 Fruit not named.....1. 00			Fresh grapes, one-half the duty on wine per hectoliter.....2. 00 Fruit not named, free.....	- entire duty.		
80	Fruit, dried, with the exception of almonds, walnuts, nuts, and other oleaginous fruits, of raisins and figs.....per 100 kilos	2. 00		10. 00					
81	Walnut cakes, and of other oleaginous materials.....do	Free.		Free.					
82	Horses.....per head	15. 00		20. 00			- 6. 00		
83	Oxen and bulls.....do	7. 50		18. 00					
84	Cows.....do	5. 00		7. 50					
85	Bullocks and young bulls.....do	2. 00		6. 00					
86	Calves.....do	0. 20		3. 00					
87	Cattle of the sheep and goat kind.....do	0. 20		0. 20		Goats.....0. 20 Sheep.....Free.	- 0. 09 + 3. 00		
88	Meat, salted or smoked or otherwise prepared.....per 100 kilos	20. 00		25. 00					
89	Fish, fresh, of all kinds.....do	Free.		Free.					
90	Butter, fresh.....do	5. 00		10. 00			+ 5. 00		
91	Cheese.....do	8. 00		15. 00		Hard.....4. 00 Soft.....3. 00	+ 4. 00 + 5. 00		
92	Honey, of all kinds.....do	5. 00		10. 00			- 5. 00		
93	Sponges, common.....do	15. 00		20. 00			+ 2. 25		
94	Mercery (mercerie): a. Common, with the exception of articles of wood and children's wooden toys.....per 100 kilos	60. 00		68. 00		Needles, sewing, 57. 75 Horns of cattle, prepared, 3. 00 Pens, metallic, except gold and silver, 57. 75 Pens, gilt, for writing, rough or prepared, free Hooks of all kinds..... Buttons and bristles...	+ 57. 00 + 2. 25 + 60. 00 As manufactures of steel. As the mercery... + 34. 90		

95	b. Fine.....do.....each..	120.00	Square, vertical.....80.00	Pens and other...50.00	+ 10.00
	Pianos, square, vertical, and grand.....	80.00	Grand.....150.00	- 7.00 plus 5 per cent. ad valorem.....	+ 20.00
96	Musical instruments, other, with the exception of church organs, portable organs, and harmoniums.....each..	1.00	2.00	0.50	+ 0.50
97	India rubber and gutta-percha, manufactured, in hardings, in ribbons, and in elastic tissues.....per 100 kilos	115.50	115.50	115.50	
98	India rubber and gutta-percha, otherwise manufactured, including made-up articles and hosiery.....per 100 kilos	32.00	32.00	Manufactured...23.85 Spun and in straps for machines.....4.60	+ 3.15
99	Hats, of felt.....do.....	50.00	100.00	*10 per cent. ad valorem.	+ 27.40
					Depending on value.

\* General tariff, additional decimes included.

† Mercerie, a variety of articles—hardware, needles, pens, inkstands, penholders, &c.

## THE RAW SILK INDUSTRY OF MILAN.

*A report by Consul Crain.*

I have the honor to submit the following in reference to the raw silk industry of this consular district.

The table below, prepared from statistics furnished by the chamber of commerce of Milan, shows the product of cocoons in the several districts of Lombardy for the year 1879, the quantity of silk-worm eggs employed, and the average prices.

*Statement showing the product of cocoons in the several districts of Lombardy.*

Districts of Lombardy.	Yellow or Italian seed.	Product from the Italian seed.		Product per ounce.	Japanese seed.	Product from the Japanese seed.		Product per ounce.	Total of seed.	Total of product.	Yield per ounce.	Average price.	Total value of crop.
	Ounces.	Kilos.	Kilos.	Kilos.	Ounces.	Kilos.	Kilos.	Ounces.	Kilos.	Kilos.	Lira.	Lira.	Lira.
Bergamo	5,000	30,000	6.00	70,000		820,000	11.71	75,000		850,000	11.33	4.93	4,191,775
Brescia	4,073	41,335	10.14	169,784		1,013,920	9.23	113,837	1,055,315	9.27	4.74	5,010,450	
Chiavenna	241	4,147	17.20	4,308		79,849	18.53	4,549	83,996	18.46	4.63	389,154	
Como:													
Como	1,000	14,280	14.28	34,000		485,720	14.28	35,000	500,000	14.28	5.26	2,680,000	
Lecco	3,000	36,000	12.00	19,000		228,000	12.00	22,000	264,000	12.00	5.23	1,378,080	
Varese	748	38,534	51.50	11,677		192,669	16.50	12,425	231,203	18.60	5.22	1,206,879	
Crema	1,882	15,945	8.47	68,881		559,732	8.12	70,763	579,677	8.13	4.54	2,603,801	
Mantua	25,000	306,000	12.00	75,000		750,000	10.00	100,000	1,050,000	10.50	5.32	5,563,600	
Milan:													
Milan	1,611	17,858	11.08	104,840		1,308,145	12.47	106,451	1,326,003	12.45	5.21	6,908,475	
Lodi	4,400	72,300	16.43	3,400		104,750	12.47	12,800	177,050	13.83	5.01	888,083	
Paria	767	18,388	23.96	10,750		193,667	18.01	11,517	212,055	18.41	4.44	941,723	
Total	47,722	568,787		516,620		5,936,512		564,342	6,325,299				31,732,077

Provinces.	Area.	Agricultural population.	Total yield of cocoons.	Average price.	Value of product.	Yield.		Value of product.	
						Per square kilometer.	Per family of five persons.	Per square kilometer.	Per family of five persons.
	K meters.	Number.	Kilos.	Lira.	Lira.	Kilos.	Kilos.	Lira.	Lira.
Piedmont	29,269	1,773,047	4,155,618	4.98	20,674,341	141.99	11.72	706.36	58.30
Liguria	5,324	412,486	55,000	5.40	297,000	10.33	0.67	55.79	3.68
Lombardy	23,527	1,852,585	6,325,295	5.02	31,732,077	268.85	17.07	1,348.75	85.06
Venice	23,464	1,459,720	3,560,443	5.57	19,884,645	151.74	12.19	845.32	67.94
Emilia	20,515	1,382,723	1,470,688	5.83	8,581,731	71.69	6.79	419.52	39.63
Tuscany	24,053	942,445	610,562	6.27	3,819,036	25.38	3.24	158.78	20.26
Marche	31,254	1,276,055	1,172,168	5.97	6,995,717	34.30	4.50	223.87	27.41
Umbria									
Comares									
Neapolitan provinces	85,316	3,475,299	1,403,775	4.10	5,802,564	16.57	20.03	68.01	8.34
Sicily	29,441	897,799	167,500	4.20	703,500	5.73	0.93	24.06	3.91
Sardinia	24,342	219,067							
Total	296,305	13,464,106	18,931,049	5.20	98,440,611	68.35	7.03	332.23	36.55

The total product of raw silk in Italy for the year 1879 is estimated at 1,200,000 kilograms, which compares with that of the ten preceding years, as follows:

	Kilograms.
1869	2,150,000
1870	3,180,000
1871	3,473,000

	Kilograms.
1872 .....	3, 125, 000
1873 .....	2, 960, 000
1874 .....	3, 430, 000
1875 .....	3, 073, 000
1876 .....	1, 000, 000
1877 .....	1, 853, 000
1878 .....	1, 900, 000

The prospect of the yield of cocoons for the present year is good. The weather has been thus far favorable for the development of the worm, now in its second stage, and the mulberry leaf is plentiful and good.

The value of declared exports of raw silk from this district to the United States for the year ending September 30, 1879, as shown by my report of that date, was \$306,624.44. Much is shipped indirectly and not declared here.

DUNHAM J. CRAIN.

UNITED STATES CONSULATE,  
Milan, May 20, 1880.

## MEXICO.

### TARIFF AND CONTRABAND LAWS OF MEXICO.

*Report of Consul Trowbridge, of Vera Cruz, on the tariff and contraband laws of Mexico and the hinderances to American trade with that country.*

I have the honor to transmit this my commercial report for 1879.

Inasmuch as the transactions in the commerce of Vera Cruz have had but little change in kind, quantity, or quality of articles imported into or exported from the port during the current year, I desire to diverge from the beaten path, and in lieu thereof to call attention to several points affecting the interests of all those who do business with Mexico, or who may wish to enter into commercial relations with this country. These points, if fully amplified, will extend these pages as much as will be proper; and, if heeded by those most pecuniarily interested, will be of infinitely more benefit to them than all else I could say. Any person wanting to know the resources of Mexico, her products, commerce, navigation, laws, schools, agriculture, mines, government, religions, revolutions, climate, seasons, health, and hundreds of other things of interest and value to know, can be satisfied on those points by reading the reports furnished by the ministers and consuls who have resided in the country and elaborately reported from year to year on them for the last thirty or forty years. And he who takes the pains to investigate will find little change, except in government and the produce of coffee, in any of the heads of inquiry during all that time. Hence I pass them to other matters not so frequently discussed.

### THE TARIFF LAW.

The Mexican Congress established a code of laws to govern the duties on imports, which went into effect January 1, 1872. The decrees, edicts, and orders, by Congress and the President clothed with *facultades extraordinarias*, or ample faculties, all refer to this standard of 1872 as a basis for criticisms or change, yet the standard still stands in name,

although terribly deformed in significance. These "ample faculties" voted to the President on many occasions gave his orders plenary powers the same as though Congress had sanctioned them, and he has from time to time so changed the original code that one would hardly recognize the first born. In one order (*aclaracion*) President Lerdo on March 30, 1876, "decreed" that reformatations should be effected on 86 articles at one time. And now we have 171 *aclaraciones* governing various articles of this code, so there is really very little of the work left which the Congress of 1872 did. All this is very proper if the changes were so made as to throw additional light on the obscure parts of the original law. But unfortunately that is not the effect generally produced. Books of the code have been issued and frequent reissues, called revisions, followed; but they gave the original law in the text, with "*aclaraciones*" added as an appendix, and the meaning is so obscure, the wording so ambiguous, that there is no concert of opinion, even among the officials collecting the revenue, as to the meaning of many of these "*aclaraciones*". The importer learns that they mean fines and increased duties, fines running to as high as \$600, and single duties averaging nearly 88 per cent. on cost, while double duties would be near 176 per cent.

#### AMBIGUITY OF THE TARIFF LAW.

They collect duties on the square meter, kilogram, millar, dozen, single piece, pairs, gross, as convenience may demand.

There are persons here now engaged in mercantile pursuits who have held high office in the custom-house service, and who hence know the law and how it is applied, who are as frequently fined and have double or treble duties to pay as are other merchants.

I cite this as a proof that the laws are ambiguous and incomprehensible, and that all merchants are at the mercy of the construction any one can put upon the significance of many sections, who has the power or official trust to exercise in the case. For instance, a responsible house in Vera Cruz gave an order in France for a common article of hooks and eyes, which were whitened or "washed," and called in France "hooks and eyes argente"; the merchant declared them as common hooks and eyes, which pay a duty of 19 cents a kilogram, inside of twenty-four hours after arrival, but they were pronounced silver or plated silver, which pays \$1.15 a kilogram, and he was fined for making a false declaration and double duty imposed (\$2.30 a kilogram), making a difference of over \$3,000 on the entry. He could have corrected his declaration within forty-eight hours after arrival of the goods, provided he had not attempted to enter them on his declaration first made, and by paying \$1.53 a kilogram. But having made a true declaration, and knowing they were not silver or even plated, he wanted them to enter on their merited grade and at 19 cents a kilogram.

#### ADVICE TO AMERICAN SHIPPERS.

A year ago, in my annual report, I gave some rules for merchants in the United States to go by in making entry of goods into Mexico, and among those rules was the following. I should say, before quoting, that I offered those rules after consulting what I considered competent and honorable Mexican authority and law, but which resulted disastrously to some who followed the direction quoted.

"I. Consult a Mexican consul on these regulations and follow instructions carefully to the letter."

To follow this recommendation would be well if the consul and the custom-house officials put the same construction on the name or description of article imported. But the consul, not being a merchant of all departments of importations from all countries, takes the descriptions and names furnished in his location as the proper ones, and honestly intends to give wholesome and correct advice and instructions. But on entry the goods are known here by another name which may change the tariff rates immensely; then fines, double duties, lawsuits, and detentions result. A merchant from the United States must use the same nomenclature recognized here; they in Europe understand this and go accordingly. What we call "muslin" in the United States is here known as "madapolam," "calico," or "shirting," and pays 9 cents per square meter, while if declared as muslin it will be recognized to mean "jaconets," or "lawns," which pay 16 cents per square meter. If we say "calico," they take the expression to mean a 9 cent square meter, but finding it "prints" with a 14 cents square meter duty, they fine you and double the duty to 28 cents per square meter. They allow forty-eight hours to correct declarations, provided that the correction does not change the tariff rate 10 per cent. Any of the examples above cited would be much more than 10 per cent. The declaration can be changed, however, by choosing the highest rate in controversy and adding thereto 33 per cent. So in reality the *privilege* of correcting a declaration is absolutely a farce, and merchants seldom avail themselves of the so-called privilege. They *must* make the declaration, and do so usually wondering what advantage will be taken of it. Is it to be wondered at if such a school should produce "scientific smugglers"? If a declaration by mistake, clerical or otherwise, sets forth a low duty article when it is in reality a high one, then a fine and double the high rate are imposed; whereas if the same kind of mistake is reversed and a high rated article is described when it is in reality a low duty article, then the original high rate declaration is held and the duty so collected. Merchants here are in the habit of instructing those of whom they order goods to put the *name* only on the invoice, as for instance "one doz. watches," and to have the description, kind, &c., clearly and fully written to them. They know they will be fined, because the consul will report the invoice as not being complete, but they know that this is generally far better than that the declaration should differ with the goods. On arrival they declare so as name, kind, weight, value, &c., shall comport with the local nomenclature, &c.

It is plain from the foregoing as well as from what will follow, that an importer must be thoroughly acquainted with and informed on the local usages of the port of entry, or he had better trust his entries to local merchants, consulting them in his orders, in order to save trouble and heavy losses.

There are 1,378 articles on which import dues are collected in Mexico, and the genius of mankind is constantly producing new ones, not included in the said list of 1,378. If something is imported not specifically named and described in the tariff code, then it is rated as some resembling substance; but because it is not that substance a fine is imposed, and usually the inevitable double duties as well. For instance, celluloid was declared by the merchant as such according to invoice; but the code said nothing of celluloid, so the resembling rate of class was a question as to whether they should call it bone, at 29 cents per kilogram, or ivory, at \$2.20 per kilogram. It was classed with the latter, *with consequences*, but being referred to higher authority was honored with an "aclaracion," and is now admitted as celluloid with specific tariff.



## REVISION OF TARIFF LAWS.

The last revision of the tariff laws was issued late in last December, comprising regulations for the introduction of these 1,378 dutiable articles and the 63 on the free list and the collection of revenue thereon. Since then over 70 changes and amendments have been effected, radically altering the published code in many essential ways, and often going into immediate operation. Hence, if an American merchant ships goods to Mexico guided by the letter of this book and not complying with these subsequent changes, which may not have been able to reach him before he shipped them, he is liable to fines and double duties for all his best and most honorable intentions. This book of tariff regulations is issued by the chief clerk in the finance department, and is by all received as the best authority on this complex subject. The 63 articles on the so-called free list have their snaretraps and pitfalls surrounding them, but the difficulties attending their introduction are infinitely less than those hovering incessantly over the dutiable goods. The tariff recognizes gross and net weights and measures, and revenues are collected on each according to stipulated regulation. Most of the drugs and medicines are listed to pay revenue on net weight or measure, but when the merchant enters his net bottle of Florida water, for instance, intending to pay duty for the 4 ounces of fluid as net, he is met with a bill of tariff covering the bottle, cork, label, and fluid contents, and told that the subtracted *gross* is the case, straw, and packing material in which the articles came. Pages of tariff books are devoted to this list of articles dutiable on net weight, and one is constantly led to believe that it means what it says, until you come to the end of the list, when you are told, in a short note printed in small type, that the weights and measures of the preceding list are understood to count in as medicines or drugs the bottle, paper, or immediate covering of the article contained, which really and radically upsets that part of the net weight schedule, and is nearly always overlooked by persons making the first entry of their goods in this country. It is a trap which catches the unwary and fills the pockets of the officials who attend it, as all the fines go to them.

It is the abuses growing out of the enforcement of fines which demoralize the local officials, and create more vexations and injustice than all the other sources of trouble. The most frivolous and contradictory excuses are resorted to that they may be collected. They constitute a kind of official autocracy, which is in the highest sense hypertechnical, which, with the acknowledged ambiguity of the Spanish language, is capable of all shades of constructions, each yielding a prolific crop of fines, which the importer has to meet. I am not drawing an angry, prejudiced, or highly-colored picture, or one from imagination, but giving facts gathered from multitudinous experiences of importers. I would give cases and names to sustain my assertions if I could do so without calling down retaliating vengeance on those giving the information.

There are articles which pay on absolute net weight and measure. Ink pays on *only the ink*, if in plain bottles or cans. But a fancy label, a metallic wafer on cork, or the most frivolous embellishment changes its whole privilege, and a duty of 29 cents per kilogram, usually doubled, is charged on bottle, packing, and case. A case in point, and now on hand: An old house or firm here ordered from an old house in France, from whom the Vera Cruz house had for years been ordering a certain kind of ink, among other articles, five hhds. of the same small bottles of ink. The Frenchman filled the order to the letter in four hhds.

and the fifth he filled with the same ink at the same price, but the bottles had a trifling difference in shape—eight sides in place of six, or *vice versa*, with foil brass to secure the cork. The import dues would be on each hhd. about \$58, on net ink. The importer read the Frenchman's letter, explaining his improved ink-bottles, to the customs officials; but they made the discovery that this one hhd. contained "bottles with ink," instead of, as declared, "ink in bottles." He was adjudged guilty of attempting to defraud the customs, and assessed double duties on all five hhds., on the hhds., straw, bottles, ink, and wrappings, making the duties, fines, &c., amount to over \$5,500, in place of \$290. The merchant ordered a certain thing, such as he had been long dealing in. The house in France, in filling the order, aimed to compliment his old customer by giving him at the same cost the same article more tastily "done up." There was no intended crime either in the French or Vera Cruz houses, but one would conclude from the decision that "bottles with ink" struck at the vitality of the constitution, while "ink in bottles" were comparatively innocent articles. If this transaction had happened one month later, or when the "contraband law" had gone into effect, then the merchant would be not only compelled to pay the \$5,500, but be fined from \$100 to \$1,000, and imprisoned in the penitentiary at hard work for from six months to five years, and have his name published abroad, in every country in which reside Mexican consuls, as a criminal working out his sentence. This, I admit, is an extreme case, but it is a true one, and so recent that the fine is not yet paid, the merchant contesting it in the courts. But he will have more still to pay, or all precedents go for naught.

Another case. An American citizen came here from England with invoices of toilet-ware, fancy soaps, some machinery (free), beer, &c. The whole invoice amounted in costs abroad to near \$1,200. He had consulted a Mexican consular officer in England as to how he should proceed, and as to his tariff fees, and came fully prepared to meet them, as he thought. He had to pay in fines and double duties about \$2,850. He was able to sell everything he had for less than \$2,000, and to borrow money enough to finish paying his duties and to get back home, being "perfectly well satisfied to remain there for all time to come."

Glass pays 19 cents per kilogram; brass, manufactured, pays 43 cents per kilogram; glass lamps, with manufactured brass enough to compose the burner, is classed as all brass, and at 43 cents per kilogram. It is considered perfectly legitimate to import the lamp and burners separate, each paying their respective duties of 19 and 43 cents per kilogram, and on clearance to put them together here.

If we expect to succeed in sending our country's produce into foreign countries to find markets and consumption, we must also expect that our country's interested citizens will go or send competent persons to look after said produce in those foreign countries. Their honest purposes should be protected and defended. In most countries this defense and protection can be found in the laws, duly executed, of the said country. It is not so here. In importing dutiable goods into this country your protection lies in your knowledge of the business on which you embark. A venture, as a rule, is a loss. Local personal knowledge is best, and for this reason the Germans have best succeeded in Mexico. They have an agent of years of experience at whatever port they enter their goods, and this agent's directions and advice are faithfully followed. The Americans should do the same, and must do so if we gain this field.

## AMERICAN VESSELS AT MEXICAN PORTS.

In my report of last year I gave the regulations requiring vessels to bring manifests, receipts, bills of health, &c., duly authenticated by a Mexican consul or two honorable merchants, *in all cases*, in order to obviate fines, detentions, and other losses. Since then experience has taught me that it is also necessary to learn from the consul that the vessel is not denounced as containing contraband goods if possible. Two vessels, the Sarah Ann, of New York, and the George Peabody, of New Orleans, were denounced, and word to that effect reached here before the vessels. The accusations were false and malicious, and doubtless made to injure those vessels and to divert their freights to other ships. Neither of them had a dollar's worth of contraband on board. I also learned that the Nellie Ware is denounced, which has not yet arrived, and her destination given as to where she is to land her contraband, saying that "she is to land her goods at the same place the Sarah Ann landed hers, at the Barra de Jesus Maria and Soto de Marina, between Tampico and Matamoras—200 packages contraband." The log-book of the Sarah Ann proves she did not go there, nor touch at any port or place until she arrived at Vera Cruz. She was guarded and searched with relentless vigilance, but no contraband found, and the annoyance of being held as in dishonorable trade, with a few days' detention, was all this vessel suffered. But the Peabody was not so fortunate. She duly cleared, with all papers required, from Mobile, with an assorted cargo, for Tampico, Tuxpan, and Vera Cruz. On arriving at Tampico she was boarded by an armed guard, had *all* of her freight searched, even that for Tuxpan and Vera Cruz, and was roughly and discourteously treated at Tampico—had to take two armed guards thence to Tuxpan. On her way to Tuxpan, and while upon the high sea, ten miles from land, and with her flag floating, she was arrested by a Mexican man-of-war, the Independencia, by a shot across her bow, ordered to heave to, was boarded, and ordered "to proceed as fast as possible to Tuxpan, and if she deviated from her course, they would sink her with their cannon." She had no contraband on board, as all their searchings proved at Tampico, Tuxpan, and Vera Cruz, and as is sworn to by the master and mate of the Peabody.

After she had been permitted to discharge her Tuxpan freight she was ordered to proceed to Vera Cruz, but the captain objected, because his crew were sick and his vessel disabled by having her cross-tree of the foremast broken and her rudder in a useless condition. Nevertheless, she was peremptorily ordered to proceed to Vera Cruz, and, after crossing the bar, was towed to this place by the Independencia. The armed guards were all the time on board from her arrival at Tampico until she was discharged at Vera Cruz. Here they sealed up every hatch, locker, and cabin in the vessel. They discharged the cargo without the consent of the captain, and while he was not on board. They ordered the breaking of one of the seals, and then fined the captain \$500 for it. They took two looking-glasses and six pictures from the vessel, listed on the store list as furniture belonging there. The master, Juan Demetrio, protested and executed affidavits before me, and the complaints, protests, and affidavits forwarded to the United States consul-general at Mexico for adjustment.

The Eveline, of New York, was seized and confiscated at Tampico last year because the captain had contraband on board. The Mexican law does not hold the ship in time of peace, except under three conditions, neither of which three conditions had she violated. I was sent to

investigate this case, and hence know personally of what I write. The *goods* and *captain* and *receivers of the goods* (contraband) were responsible, but not the vessel. But the receivers of the goods being, some of them, custom-house high officials, who were just then being visited by an inspector and in great danger of being detected by him, cried "stop thief" against the ship to clear themselves, and the Eveline was seized. The judge trying the cause has an indictment for murder he committed in this State still pending against him, and in the Eveline case acted as witness, lawyer, and judge against her, and hence succeeded in condemning the vessel. She was old and of small value; hence the owners in New York abandoned the cause rather than to follow it to higher courts with the consequent expenses and uncertainties. The confiscation was an outrage nevertheless.

The American schooner *Ulrica R. Smith*, of Machias, Me., came here from New York with assorted cargo, and, having met strong storms at sea, threw her deck load overboard to lighten and save the vessel, crew, and cargo under hatches. When she arrived the officials made their visit, and the master told them the circumstances of the throwing overboard the said deck load, and asked them what steps he should take in the matter. They told him to go and see the collector and the United States consul. He did so, and the collector fined him \$700 for not making his declaration before leaving his vessel and having it witnessed by his crew. He protested against paying the fine, setting forth his conversation with the officers on board in his protest. Said officers denied the conversation, although witnessed by the whole crew. The case was forwarded to Mr. Foster, who failed to have the fine remitted, although he presented the wrongs the fine perpetrated with great clearness and force. They accused the captain with landing the missing cargo at some place not a port of entry as contraband. That act, if it had been accomplished, would justly have confiscated the vessel, it being one of the conditions of Mexican law, before referred to, which condemns the ship, as well as cargo and those concerned therein. The fact that they did not proceed against the vessel proves the groundlessness of their accusation. They made no attempt to define the time, place, or manner of the alleged landing, and placed the case for the captain to prove that he had not done so, ignoring, at the same time, the evidence of his crew and log-book as interested witnesses. These things have not always been so, nor are all the vessels coming here subjected to such indignities.

#### THE CONTRABAND LAW.

This law was enacted June 5, 1879, and has 13 sections, 12 of which passed the house and senate; the 13th passed the senate, but not the house; still, all 13 sections received the approbation of the President, and are recognized as valid law. The fearful penalties this law imposes on those who are more likely to be innocent than guilty caused the merchants of this city to close their houses until a commission could explain their grievances to the President and obtain modifications and specific definitions, which were only partially satisfactory to the merchants. The law was so framed as to go into effect with a discrimination against shipments from the United States of a month's time. Thus, a vessel clearing from the United States before August 15 would reach here in *August*, whereas a ship clearing from Europe August 31 would reach here about the 1st of October, and the 15th and 31st of August are the dates fixed in the law for the respective countries. If there were oppressions expected or intended it would be natural to suppose that those

who would first encounter the change would feel it most, the clause in our reciprocity treaty about "favored nations" to the contrary notwithstanding. The law makes the receiver of goods wholly responsible for the shipment, the receiver being at the port of entry, and helpless, if he be the consignee of goods he has had no part in ordering or giving directions in sending, or if either have in any manner been disobeyed or unfulfilled. Merchants dare not now, without a sufficient guarantee, receive consignments for fear of fines, increased duties, and imprisonments.

Wholesale merchants are making no orders, as a rule, for goods, hoping that the law may be amended by the present Congress, whereby the obnoxious features may be expunged which makes them responsible for acts of shippers who live in foreign countries, and over whom they can exercise no controlling supervision. If the law is maintained *and fully enforced*, commercial transactions with Mexico will surely dwindle to a shadow of their present limited dimensions. Even the Germans, who have so long held the field, say they must close their business and abandon the country if they vigorously enforce the law; and if they, with their long experience, knowledge of the country, and their economical application to all the detail of their negotiations, cannot succeed, it is hardly worth while for our merchants to wreck their fortunes in the vain effort to redeem so hopeless a cause. If the law had a controlling effect on the prevention of smuggling no honorably disposed person would raise a voice against it; but unfortunately it fails to affect that nefarious traffic, while it fires an inflaming broadside into well-intended purposes.

#### STORAGE AND CONCLUSION.

An *aclaracion* has recently been promulgated by the President to prevent goods remaining long at the warehouses of the custom-houses throughout the Republic, which doubtless will produce the desired removal promptly. After the clearance of the vessel in which it came, a box, bale, or parcel of goods has 15 days storage in the custom-house free; then 5 cents a day is charged for 10 days; 10 cents a day for the next 5 days, and from that time to when the goods are removed 50 cents a day is recovered. A respectable merchant of Vera Cruz received 60 bales of goods on consignment from Europe for a house in the interior of Mexico. No papers came with the goods, probably, as is supposed, by fault of postal conveyance from Europe to the interior and return to Vera Cruz; 70 days elapsed before the papers were presented, and then his storage account stood as follows:

60 bales of goods 15 days .....	Free.
60 bales of goods 10 days at 5 cents per day .....	\$30
60 bales of goods 5 days at 10 cents per day .....	30
60 bales of goods 40 days at 50 cents per day .....	1,200
70 days .....	1,260

The size or value of the parcel, package, bale, box, or trunk does not affect the above rate on storage. It is important that our people desiring to do business with this country should note and heed these figures; also, that customs officials are not responsible for goods damaged while in their custody.

I have given the foregoing pages in order that our business men may profit by the facts therein contained. It may appear, as a whole, that I have drawn an unnecessarily dark picture, in which there are no rays of light interposed. But a good pilot is he who describes the shoals, reefs, and dangerous obstacles with truth and clearness that the ship

in its passage may not be stranded, presuming, at the same time, that the mariner does not care to be told of smooth seas where he can sail without assistance. Hence, so to say, I have given the bearing of some of the reefs and rocks, which I hope may be guarded with skill and discretion until such times as they may disappear. I had much rather write of the many beautiful and valuable things this country has, but they have been the themes of mine and many other abler pens for many years, and I cheerfully indorse the facts, and beg our countrymen to carefully investigate, for their high benefit, all the truths those pens have given to the current stock of literature.

S. T. TROWBRIDGE,  
U. S. Consul.

UNITED STATES CONSULATE,  
Vera Cruz, September 30, 1879.

## PORTUGUESE POSSESSIONS.

### SAINT PAUL DE LOANDA.

*Report, by Consul Newton, on the trade, commerce, navigation, and public works of Saint Paul de Loanda from January, 1878, to March, 1879.\**

Trade during the past year has shown considerable improvement over the two preceding years, although not sufficient to renew the old prosperous condition. Provisions were scarce and the natives suffered greatly on this account, but since the beginning of the present year native provisions of all descriptions abound, owing to the regular and plentiful rains. During the last four months there has fallen more rain in and around Loanda than has been known for some five years inclusive. The surrounding country looks fresh and green, while the natives are busily employed in planting, consequently it is not expected that there will be any scarcity of provisions this year.

One or two firms have stopped payment, and there still exists a general want of confidence. Prices of all kinds of produce in the European markets have been very low, only about equivalent to what has been paid for it here, thereby causing heavy losses, which still continue, to fall on this market.

As stated above, since the beginning of the year the rains have been regular, and there is every sign that the present state of affairs is about to be changed for the better. The present time offers a good opportunity for any one desiring to open up a business with this market, as no doubt in a few months there will be a great scarcity of goods of all sorts, especially cotton goods.

The following list of cotton goods principally used in this market will be useful for the guidance of those manufacturers who may wish to try this market:

Selling price per piece.

Gray domestics, of heavy quality and starched, each piece 30 yards by 25 inches.	\$2 70
Same, 30 yards by 22 inches.....	2 45
American strips or denims, 18 yards by 25 inches.....	2 22
Same, 18 yards by 31 inches.....	2 93

\* NOTE.—This interesting report by Consul Newton was overlooked when the matter for the Secretary's letter was being compiled; hence the omission to note it therein, and the further omission of its failure to appear in its proper place in this volume.

	Selling price per piece.
Blue and white checks, 18 yards by 25 inches.....	\$2 22
Same, 18 yards by 31 inches.....	2 93
Blue baft, heavy, 18 yards by 40 inches.....	4 56
Fancy prints, clear ground, 26 yards by 30 inches.....	3 80
Morim, or white shirting, 24 yards by 35 inches.....	3 80

The above are for the local market, and should be of good quality. Duties are about 20 per cent. on cost price. These goods when they come from England via Lisbon, where they are transshipped into Portuguese vessels, only pay 10 per cent. of the duties, whereas if they come in English or American vessels they have to pay full duties.

For the barter trade :	Selling price per piece.
American stripes or denims, 18 yards by 24 inches.....	\$1 20
Checks, 18 yards by 24 inches.....	1 30
Blue baft, 18 yards by 30 inches.....	1 64
Satin stripes, 18 yards by 30 inches.....	1 64
Chilloes, 17 yards by 27 inches.....	1 20
Dark blue fancy stripes, 18 yards by 24 inches.....	1 52

All these should be well starched.

The prices quoted are for a medium quality of goods; but even a lower quality of cloth is used here with advantage.

Many qualities of handkerchiefs are also in use, ranging from 12 to 15 handkerchiefs per piece.

In cotton goods the above-mentioned cloths may be considered the staple articles of trade.

I have several times procured samples of these goods for captains of vessels and traders that have been here in order to encourage the trade, as I am of opinion that American manufacturers are quite able to compete with the English, at least in the better qualities.

Several years ago American goods were preferred in this market. Particular attention should be paid to the regularity and sizes of the pieces. One hundred pieces is about the usual quantity put up in each bale.

In former years large quantities of molasses rum were shipped from America to this port, but of late this colony has almost produced sufficient for its own consumption. There are large plantations of sugar-cane at Mossamedes, Benguelea, Nova Redondo, Ambiez, and in the Quanza River, which, it is estimated, have produced in each of the last 3 years about 4,500 pipes. This quality of rum is much preferred by the natives. Towards the end of last year the cane, owing to the want of rain, was attacked by a small grub, called here the "rosca," and the plantations all over the province were more or less destroyed, causing great loss to the planters. The small quantity distilled during the latter months of 1878 sold for the high price of 90,000 reis to 95,000 reis per pipe of 130 gallons, equal to \$97.82 to \$103.26.

This year the crop is expected to be much better. Great care should be taken by any one shipping rum to this part of the coast to see that it is of a clear white color, and that it is put into casks which will not in any way discolor it.

American flour, which used also to be shipped largely to this port, is now thoroughly discredited and difficult of sale. This is the result of American merchants sending flour of a very low quality.

The following are the principal articles of produce exported from here, viz: coffee, palm-oil, palm-kernels, wax, rubber, peanuts, ivory, adansonian fiber or liconde, cottons, orchilla weed, and gum copal.

## COFFEE.

The quality of Angola coffee is very inferior, and realizes about the lowest price in the European markets. At present it is not worth more than 45s. per cwt. in England. The total crop exported from here last year was about 2,500 tons. The quality was better than former years, but, owing to the low prices ruling in Europe, it is feared the merchants will lose heavily on last year's purchases, as the price at which the coffee was bought here was higher than the present European prices. If the market does not improve, the cultivation of coffee will be greatly neglected, as at present planters make barely enough to cover their working expenses. The heavy rains we have had this year have improved all the plantations, which are now looking green and healthy.

## PALM-OIL.

Last year's crop was exceptionally small, owing to the want of rain. This year the crop, which is about to commence, promises to be a good and abundant one.

The price ruling here through last year was about 45,000 reis per pipe of 950 pounds, equal to about 5½ cents per pound.

## PALM-KERNELS.

The above remarks respecting the crops, &c., apply also to palm-kernels; the price has been steady all through the year at about 500 reis per 32 pounds; or, say, about 55 cents per 32 pounds.

## PEANUTS.

This article of export, which in 1868 and 1869 was equal to 5,000 tons from this port alone, has dwindled down to almost nothing, owing to failure of crops year after year from want of rains; in fact, there has been barely enough for the native consumption. The prices which it has been sold at for some few years past have ranged as high as \$2.75 per arroba or per 32 pounds. The current price when it was exported largely was only 600 reis per 32 pounds. A considerable quantity has been planted this season, and it may be expected that this year peanuts will again be a staple article of export.

## WAX.

The amount gathered has been about the medium quantity. The prices realized in Lisbon, to which all wax from here is shipped, have been very low, and will show a heavy loss on shipments. The current price here at present is 150 reis, or, say, 16 cents, per pound; formerly it used to be 250 reis, or 27 cents, per pound.

## RUBBER.

The crop has been small. The reason of this is that the natives in collecting the rubber have destroyed the greater part of the trees in places near their homes, and have consequently a greater distance to go to gather fresh supplies. If they continue their wanton custom of destroying the trees, it is to be feared that this article will, ere long, be a very small item in the list of exports. Price, 29 cents per pound.



## IVORY.

The quantity brought in for sale has been below the medium, and prices have been well sustained, \$1.74 per pound being about the average for prime.

## COTTON, ORCHILLA WEED, AND GUM COPAL.

The quantity shipped of these articles has been very small compared with former years. The want of rain is the reason why the cotton crop has been so small; and the price offered in Europe for the orchilla weed and gum copal is, I think, the principal reason why these articles are not shipped to as large an extent as formerly. When any article of produce gets down to a low price the natives give up growing or collecting it, as their time is not properly paid for.

## ADANSONIAN FIBER, OR LICONDE.

This is quite a new article of export from this port, although some years ago it was largely shipped from the northern ports. During the year 1878 about 8,000 bales were shipped from here.

Owing to the large quantity sent, the price has fallen at home considerably, and the latest quotation of £8 10s. per ton will, it is feared, prevent the natives from gathering it. Lately the quantity brought has fallen off very much. The fiber is the inner bark of the baobab tree, which grows here abundantly. The fiber is torn up into strips and dried in the sun. Very good ropes are made from the same fiber by the natives.

## NATIVE PROVISIONS.

The price ruling in March, 1878, and at the present time, for these provisions, are given below, viz:

[Per arroba of 32 pounds.]

	March, 1878.	March, 1879.
Farinha de mandioca .....	\$1 30 to \$2 90	\$1 00 to \$2 20
Milho, or Indian corn .....	90 to 1 40	40 to 65
Beans .....	65 to 2 20	65 to 1 40

The greater part of the produce shipped from Loanda comes from the river Quanza, some 50 to 60 miles to the south of this, but a considerable amount of coffee is brought in from the Encoje district, a short distance north of Loanda, the trading port being at the mouth of the river Dande.

A line of steamers, called the "Quanza River Steam Navigation Company," runs regularly between this and Dande, a town about 180 miles up the river Quanza, making about one voyage per week. The company have at present four steamers, two of which are running and two under repair; they have also several large iron barges for river work. The last new steamer, built in London, draws 2 feet of water and steams 10 knots, carrying 120 tons cargo, but she is not exactly what is wanted, being too lightly built for towing purposes. She is called the *Silva Americano*, after the late consul, Mr. A. A. Silva, who was the original promoter of this company.

The following statement shows the quantity of produce brought down the river Quanza in 1878 in the Quanza Company's steamers, viz :

*Statement of produce conveyed to Loanda by the Quanza Company's steamers during 1878.*

Palm oil .....	puncheons..	46
Do .....	pipes..	538½
Do .....	barrels..	477
Do .....	saaker..	12
Do .....	liters..	352, 050
Coffee .....	sacks..	21, 698
Do .....	kilograms..	1, 375, 009. 282
Rubber .....	pipes..	39
Do .....	barrels..	9
Do .....	sacks..	2, 524
Do .....	kilograms..	147, 337. 164
Wax .....	sacks..	301
Do .....	cakes..	2, 454
Do .....	kilograms..	227, 330. 307
Palm kernels .....	sacks..	6, 462
Do .....	kilograms..	192, 483. 486
Fiber .....	bales..	6, 116
Do .....	kilograms..	760, 618. 539
Peanuts .....	sacks..	618
Do .....	kilograms..	26, 391. 582
Ivory .....	packages..	679
Do .....	kilograms..	6, 278. 208
Gum .....	barrels..	33
Do .....	sacks..	66
Do .....	kilograms..	4, 551. 903
Orchilla weed .....	sacks..	38
Do .....	kilograms..	1, 388. 016
Hides .....	packages..	925
Do .....	kilograms..	5, 580. 981
Peanut oil .....	pipes..	26
Do .....	barrels..	95
Do .....	liters..	42, 500
Planks .....	packages..	35
Tobacco .....	packages..	244
Do .....	kilograms..	4, 659. 309
Cotton .....	bales..	25
Do .....	kilograms..	2, 277. 099
Beans .....	sacks..	544
Do .....	kilograms..	24, 514. 731
Farinha de mandioca .....	sacks..	3, 467
Do .....	kilograms..	192, 343. 032
Fuba .....	sacks..	604
Do .....	kilograms..	27, 802. 089
Indian corn .....	sacks..	1, 594
Do .....	kilograms..	61, 890. 642
Potatoes .....	sacks..	6
Do .....	cases..	9
Do .....	kilograms..	204. 714
Mammonaj .....	sack..	1
Do .....	kilograms..	43. 146

The number and description of sea-going vessels entering at Loanda during the year 1878 was as follows :

English mail steamers .....	9
English trading steamers .....	1
English brig steamers .....	1
English men-of-war steamers .....	7
French men-of-war .....	2
French sailing vessels, merchant .....	4
Dutch trading steamers .....	10
American schooners .....	1
Portuguese mail steamers .....	24
Portuguese sailing vessels, merchant .....	24

It is difficult to obtain further particulars as to tonnage, &c., from the custom-house.

The last American man-of-war that entered this port was the *Essex*, in December, 1877, on her way to the Brazils via St. Helena.

The port charges are not heavy; for vessels of over 200 tons the amount would be about 65,000 reis, \$70.65, after being ten days in port discharging cargo.

Trading vessels coming to this port which do not intend discharging all their cargo here should declare on the manifest that they are bound to the "West coast of Africa, and a market," and thus save great trouble and inconvenience, as should their manifest be made out for Loanda only the custom-house would oblige them to discharge the whole of their cargo here.

Communication with Europe last year was carried on by two lines of steamers, one Portuguese and one English. The former leave Lisbon on the 5th of each month, touching at Madeira, St. Vincent, St. Iago, Prince's Island, St. Thomas Island, Ambriz, Loanda, Benquella, and Mossamedes, while the latter have no fixed date of starting from Liverpool, but leave once a month and touch at 25 to 30 ports on the west coast. Since the beginning of this year the English line of steamers have started from Hamburg, calling at Plymouth for mails, and receiving the Liverpool cargo at Bonny, where they also transfer the homeward cargo for Liverpool. The companies have trucks as deposits at Bonny for this purpose.

Exchange during the year has been at 920 reis per dollar, or 4,500 reis per pound sterling. The bank rates were as follows: Discount for bills at three months, drawn and accepted in the Province, 10 to 12 per cent. per annum. Interest on loans on property 9 per cent. per annum. Accounts current for consignments of produce 10 per cent. per annum.

	Buying rate.
<b>Bills on Lisbon:</b>	
8 days .....	3 per cent.
30 days .....	2½ per cent.
60 days .....	2 per cent.
90 days .....	1½ per cent.
<b>Exchange on London:</b>	
90 days .....	52½ per 1,000 reis.
60 days .....	52½
<b>Buying rates:</b>	
30 days .....	52
8 days .....	51½
90 days .....	55½
60 days .....	55½
<b>Selling rates:</b>	
30 days .....	55
8 days .....	54½

The following statement shows the amount of duties collected at the custom-house, and value of imports and exports during the last ten years. A great decrease will be observed in the years 1877 and 1878.

*Statement note of the revenue of the custom-house of London during the under-noted ten years, and of the value of produce and goods imported, exported, and re-exported in the same custom-house during the same period.*

Years.	Revenue.	Value of produce and goods.		
		Imported.	Exported.	Re-exported.
	<i>Reis.</i>	<i>Reis.</i>	<i>Reis.</i>	<i>Reis.</i>
1869.....	243,823,505	1,055,681,098	656,390,729	166,243,706
1870.....	274,741,918	1,193,156,176	873,333,987	170,371,050
1871.....	276,627,980	1,377,189,681	1,030,430,673	165,764,820
1872.....	297,311,461	1,362,218,396	1,136,621,962	112,120,590
1873.....	285,491,305	1,436,487,661	1,070,828,555	112,087,405
1874.....	259,615,173	1,356,133,239	1,320,285,441	102,408,780
1875.....	271,767,382	1,279,199,712	785,269,134	64,143,406
1876.....	264,010,508	1,233,600,673	801,950,348	42,253,307
1877.....	106,379,841	911,333,798	737,964,704	34,858,983
1878.....	197,256,281	899,879,675	782,723,581	14,640,476

NOTE.—This revenue includes all imposts collected in the customs-houses.

#### PUBLIC WORKS.

A large amount of money has been expended by the staff of engineers and workmen sent out in 1877 to commence a line of railway to the interior, passing through the coffee districts, and for general improvements in the province but, for the money spent, little or no result is shown beyond a single line of telegraph from Loanda to Columbia in the Quanza River, a distance of 21 miles, and then continued along the banks of the river for about 25 miles to a place called Cunga. During this rainy season the last mentioned part of the line has been rendered useless on account of the posts having in many places fallen down. A road from Loanda to the river Dande has been commenced, but only a cutting of about two miles in length has been made as yet.

The fine new hospital begun in 1875-'76, and mentioned in my report for that year, is still far from being completed, and the other improvements, such as a new wharf of sufficient size to allow large vessels to get along side, and better means of conveying fresh water to this from the river Bengo, also contemplated at that time, have not yet been commenced.

A considerable portion of the money granted has also been used in the erection and fitting up of workshops, which are being built of very large extent, and in a style which is thought to be far superior to the requirements of the province.

The useless and extravagant manner in which money has been squandered, is causing much public criticism in Lisbon. When the time (three years) for which the employes were engaged expires, I believe the greater part of them will go home, as they are also disgusted with the work done and are tired of their service here.

#### EMIGRATION.

During the past year emigrants, or as they are called here "colonos," have been sent regularly from the province to the island of St. Thomas. Between January and December, 1878, 869 natives, of both sexes, were shipped from Loanda, and 574 from Nova Redondo. Contractors appointed by government, situated at several places in the interior, engage these people, or in fact ransom them, as generally they are slaves from the far interior, and they are thus liberated. They are often brought in half starved, and are well treated by the contractors, and as a rule they proceed to St. Thomas with the greatest pleasure. They

go under contracts of from two to five years, all of which are made before the government agents, and the government do everything in their power to see that the law is not abused. Certain conditions are made as to dress, food, &c., and they are asked if they go of their own free will, before they are allowed to leave the province. Everything is done to secure good provisions for them during the voyage, and the vessels conveying them are thoroughly examined before they are allowed to leave the port, and are obliged to carry a medical man. No vessel is allowed to carry more than one person for every 2 tons register.

#### CAMARA MUNICIPAL OR TOWN COUNCIL.

Great complaints have of late been made against the corporation, as the city is reported to be in such a dirty condition as has not been known for years, the heavy rains having carried the sands down from the surrounding high land in all directions, and some of the streets have over two feet of sand in them. The medical men say that the city has not been so unhealthy for some time past, and within the last few days there have been several cases of fulminant fever, which have carried off the victims in a few hours. Intermittent fever is also very prevalent at present.

The only American vessel in port just now is the brigantine Julia F. Carney, of Boston. She brought a large cargo of petroleum, flour, and lumber, &c., but will not dispose of much in this port.

ROBERT S. NEWTON.

ST. PAUL DE LOANDA,  
April 10, 1879.

---

#### SOUTH RUSSIA.

*Report, by Consul Dyer, of Odessa, on the grain trade, manufactures, habits and customs of the merchants, landed proprietors, and working classes, &c., of South Russia.*

The year 1878 was one of extraordinary consequence for Odessa and the various ports of South Russia. During the time of the war with Turkey, the ports of Russia having been blockaded, commerce was almost entirely suspended; the comparatively limited amount of produce which found its way northward by means of the railways not being sufficient in quantity to make any sensible impression upon the stocks produced during the year. The railways leading from the south to the north having been occupied in military transportation, they had not the ability to greatly benefit commerce, and in any event their tariff was too high to justify their use in commerce.

The crop of 1877 was enormous, and that of 1878 far beyond the average, and during the war enormous stocks were bought up and stored, awaiting the cessation of hostilities and the reopening of commerce. When the war ended in April, 1878, shipments commenced on a grand scale, and the business of the year, as exhibited by the accompanying tables, was the largest in the history of Odessa, or of South Russia. It was in fact the business of two years transacted within the space of one year.

The result of this wonderful commercial movement has made itself apparent in every direction, and here in Odessa increased life and activity,

together with the more hopeful appearance of everything, has had a most encouraging and cheering effect, and led to many local improvements of a most beneficial nature.

Rents in Odessa have gone enormously high, and the necessities of life may be said to be almost double what they were two years ago, but the price of labor has increased in like proportions, and the laboring classes have not therefore greatly suffered by these changes.

#### EXCHANGE.

During the year 1878 the Russian paper rouble continued to depreciate until it reached as low as 40 per cent. discount, at which rate it remains with constant limited fluctuations. To these people this seems an enormous depreciation, and causes many people to think the financial prospects of the empire in a most hopeless condition. But to those who know to what extent the paper money of the United States depreciated during and after the civil war there, this depreciation is not discouraging. It has had, however, a most depressing effect upon the import trade of the country, but to an equal extent perhaps a beneficial effect upon the manufacturing interests thereof.

#### MANUFACTURES.

Notwithstanding the benefits to this interest that the heavy tax upon imports caused by depreciation of the currency, and the high price of gold with which to make foreign balances, and also the increased duties caused by the requirements that all duties be paid in gold, or in currency at 50 per cent. of its nominal value, I do not think that the manufacturing classes have strengthened themselves as they might and should have done. It was confidently hoped and expected that manufacturers would have embraced the opportunities of the war and consequent blockade, and the circumstances last above mentioned, to have demonstrated their ability to meet the demands and requirements of the country not only in quantity but in quality of their fabrications. This I am compelled to say has not been done. Instead of improving their wares they took advantage of the opportunity to fabricate shoddy, worthless articles, and consequently to compel buyers to return again to the purchase of foreign-made goods at the moment they again became available, even at a greatly enhanced cost to the consumer.

The patriotic sentiment of the country was, during the war, greatly aroused and might have been made most useful in the direction named, but the opportunity was to some extent lost.

#### GRAIN.

It may be said that the year 1878, with its experiences, has cast gloom and dismay upon the shipping and agricultural classes of this country. With an enormous crop, harvested under most favorable circumstances, with the paper rouble with which grain purchases are made greatly depreciated (40 per cent.), with freights at 50 per cent. of former usual rates, they have not been able to compete in the English and North Continental markets with American grain. Nor have they been able to prevent the Americans from gaining a foothold in the markets of Spain. They now even fear that American grain may find its way within the "Pillars of Hercules," and come down the Mediterranean to the South France and Italian ports, and thus compete with them in

the markets that they have always regarded as peculiarly their own. Under these circumstances, it is not wonderful that the people interested have felt discouragement and dismay at future prospects. To one acquainted with the ways of business in America, and seeing the contrast between that and the mode here, the causes which produce these results are not far to seek; they are visible.

#### HABITS AND CUSTOMS OF THE WORKING CLASSES.

Ignorance and superstition, of which the church takes advantage, contribute enormously. There are more than a hundred days in the year which are "*prasnick's*," or holidays, when political saints and ecclesiastical sinners are alike fêted and celebrated; when all the world is expected to go to the church, and go through the performance of worship. Unhappily, they are not always taught by the church that industry, sobriety, and a proper provision for themselves and families, should form any part of their religious duty; and the working classes devote the remainder of their holidays to drunkenness and dissipation; and the consequent unfitting of themselves for the proper performance of their industrial duties, well satisfied with having gone to the church and performed the usual observances of the day. Although the clergy are being reformed and much elevated in their moral and intellectual character, the example of many of them is not well calculated to elevate the people.

It may easily be seen that this large number of ecclesiastical "*strikes*" or "*lock outs*," together with the consequent demoralization of the laborer by idleness, drunkenness, &c., quite renders impossible the steady, well-directed prosecution of any enterprise depending upon their work. For days, even for a week, as at Christmas and Easter, ships lie half-loaded in the docks, not finding labor to complete them. In household and domestic affairs, experiences are quite as painful, for the church teaches that it is not good for man to indulge in warm dinners nor to breakfast on hot cakes. This state of affairs is submitted to with wonderful docility and piety by the native elements, but the foreigner continues to remonstrate and protest, but he remonstrates and protests in vain.

In addition to this, the peasantry are slow, stupid, and unskillful to an incredible extent. They are devoted to the ways of their forefathers, and do not welcome nor co-operate with any innovations upon the old system of hundreds of years ago. They detest the use of modern appliances and facilities, and will only adopt them when it is no longer possible to avoid their use. The competition of America will have that result.

#### HABITS AND CUSTOMS OF THE LANDED PROPRIETORS.

The landed proprietor also contributes to the causes now being considered. As the peasant is amiable, gentle, affectionate, and even devoted, so is the Russian country gentleman always kind, hospitable, a genial companion, a constant friend. He is not greatly fond of work, but loves official distinction and display. Abroad he has an American ambition to be a "*swell*," and at home he does not know how to economize. These propensities and characteristics are taken advantage of by the children of Israel and other money lenders, and the proprietor soon passes into the hands of this class of people and becomes the victim of a class of parasites, known in business life as middlemen, who make all transactions. In many and, perhaps, in most cases there is a moneyed obligation which makes the middleman potent, but aside from that it is the

custom of the country to operate through this class of persons. Growing out of an admiration for position and the preference shown to official life with its display of elegance and leisure, and the numerous attachés thereof, it is considered the genteel thing to leave the details of business to the care of subordinates, and to be, if one must be a merchant, a "gentleman merchant"; if a landed proprietor, a genteel one; if a householder, an aristocratic one; and generally to treat the business affairs of life with cold contempt and disdain. Grain, wool, and every article of produce is sold through middlemen. A house is always in such hands for rent. A draft on London is sold and purchased by means of a "go-between," and these persons do not fail to have their commission, the seller paying his proportion and the buyer his. All this makes a gigantic tax upon the commerce and industries of the country simply for the benefit of a non-producing class of persons, generally Jews, for it is they who are willing to take the crumbs that fall from the table of the haughty, the rich, and the proud, and to endure the disdain with which such persons are treated by their imperious principals.

These middlemen often manipulate grain in the most extraordinary manner. The dust and dirt and refuse from grain properly cleaned for the market is bought by them and again and again remixed with grain purchased by them, and thus the process goes on almost forever. There is no classification of grain worthy of the name. Each merchant makes his own classification, the final exporter bearing the expense and loss of all the aforementioned admixture of impurities. It can readily be seen that this is again a heavy tax upon the commerce of the country.

#### LOADING ON BOARD SHIPS.

This again is another drawback in the possibility of this country competing in the grain trade with America. There are no grain elevators nor any facilities for handling grain other than those of the most primitive kinds. The article arrives by railway, by wagon, or by barge, from the rivers, and is purchased by the merchants who have their warehouses in various places about the city. When the exporter buys and is ready to ship he must make contracts as best he can to have the grain transported by wagons from the warehouse to the ship. He must again make the best arrangements he can to have it placed on board. Should his steamer arrive at a time when the laborers are occupied with their devotions, he will be compelled either to pay demurrage upon his ship or to pay an enormous price to have his grain transported and placed on board. These prices fluctuate very greatly, running from 20 kopeks the tetetwert of 6 bushels to one rouble for a like quantity. It is possible to load a ship quickly and economically, as is often done, but the idea I mean to convey is that the buyer cannot know at what price this can be done, and he taxes the commerce in which he is engaged with this doubt and uncertainty. It often costs the merchant half as much to put his cargo on board as the freight to Antwerp, London, or Havre costs him, and a buyer from one of those markets must take these circumstances into consideration in giving his orders and must tax them against the trade.

A plan is now being mooted for the introduction of elevators upon the American system, but modified as may seem to be required by the peculiarities of the trade here.

Several Americans have been here to obtain the concession for that purpose, but failing to obtain an exclusive privilege, without which they



were not willing to engage their capital in the enterprise, I think the idea has been by them abandoned. It is, however, now said that a resident English engineer has proposed a plan, and is hopeful of carrying it to successful execution, that would put an end to many of the losses and inconveniences that now exist in the loading of grain. Such a scheme will have many difficulties to contend against, but in my opinion would be enormously profitable, and would certainly be most useful.

#### FLUCTUATING CURRENCY.

This now operates against the export trade very greatly. The people of the United States engaged in forcing trade know to what extent this cause operates. The value of the currency changing from day to day, the purchaser never knows what his goods will cost him, and the seller never knows what he is to receive.

#### LOCAL TAXATION.

Then again another tax upon the grain export trade is local taxation. Here in Odessa every *tchetwert* of grain exported must pay to the city a tax of (5) five kopeks the *tchetwert* for the city's benefit. This in the course of the year amounts to a large sum and is a tax that the trade cannot support. Similar taxation exists at Sevastopol and other ports in my consular district.

#### RAILWAY TRANSPORTATION.

Railway transportation is so uncertain and so unreliable and at the same time so expensive that it cannot profitably be used in the transport of grain. The railways of this empire having been constructed solely with a view to strategical use it is not wonderful that they cannot be made useful in commerce. When, however, it is possible to use them for that purpose the expense and the uncertainty is so great as to make them impossible. The planter does not know when he places his grain at the station whether it will be speedily transported or whether it will be allowed to rot in the bags. And the buyer can make no contracts with any kind of certainty that the grain will ever arrive. It would be tedious to illustrate this idea by a recitation of the various experiences that have come to my knowledge. It is, however, proper to add that the years just past have been years of peculiar difficulty in this regard; the railways in the south of the empire having been almost exclusively monopolized by the government in the transportation of troops and military supplies.

It may be added, however, that the management of railways in this country is so stupidly bad and inefficient as to render them of the least possible value, considered from any point of view. The express train that runs from this city to the frontier, connecting with the Berlin and Vienna express trains, consumes as much time in a run of five hundred versts as the trains beyond the frontier consume in running a distance more than three times as great.

Last year the personal baggage of my family, sent from Paris by "*petite vitesse*," known in America as "express," was five weeks in coming from the frontier to Odessa, a distance one-half as great as from Buffalo to New York. In America thirty-six hours would have been a disgustingly long time. I have recently read of a shipment of grain going from Milwaukee to New York in four days. Here such a distance

would have required six weeks. The expense, uncertainty, and interest on the money invested would have made any transaction utterly impossible. This is another gigantic tax on the commerce of the country.

#### BANKING.

There are, properly speaking, no banking facilities here. Exclusive bankers are scarcely known. The banking business is done by merchants and is done in the most bungling, inefficient way possible. An account current is an enigma to them and a draft on London an almost insurmountable difficulty. I have sometimes had occasion to purchase a draft and have found it a matter requiring hours of time. The acceptance of a deposit is worthy a night's consideration. What would an American merchant think to be told at the time of making a deposit that the amount could not be subject to his check for forty-eight hours? That his draft on a foreign capital would be ready for delivery in twenty-four hours.

These people fail entirely in that quick, decisive rapidity of execution that makes the bank the active agent and efficient promoter of the interests of commerce.

#### CORRUPTION, SEMI AND ACTUAL.

These exist in all countries, and perhaps an American should approach the consideration of this subject with some delicacy, for, unhappily, I am led to think that our reputation in this regard is not spotless. But in this country it is a tax upon commerce that is worth consideration. Every possible transaction pays a fee. From the cook, who takes his commission in the markets, to the highest official, it is currently reported that "*backshish*" plays an important part. In the grain trade the warehouseman has his percentage, and through every step incident to commerce no person allows himself to be slighted. No one thinks of doing business without bestowing upon every one through whose hands his business must pass an English "*tip*," a French "*pour boire*," a German "*trinkgeld*," or a Russian "*chae*."

These amounts are but small in each individual case, but in the aggregate they amount to an enormous sum, and it is the commerce of the country that must bear the expense.

#### GENERAL REMARKS.

Under all these combined circumstances it is not wonderful that this country cannot compete with America in the grain trade.

When one considers the small numbers of the population, the inefficiency of labor, the great extent of personal estates, the vast amount of soil in many places in the hands of the clergy, the monasteries, and the state, the impoverished condition of the former serfs, the condition of the proprietors overwhelmed with debts, the want of capital and banking facilities, the horrible condition of the roads, the miserable management of the railways, the total absence of proper facilities for handling grain, the tax of middlemen, the absence of public spirit and enterprise, the fluctuating currency, the taxation, the military drafts and requirements, and the corruption, one is rather surprised that they are able to make even a struggle towards competition or that they even rise to the grandeur of a hope to compete with America.

The necessities of the situation will finally compel them to reform in

all these matters; but will they commence before they are distanced in the race? Many intelligent proprietors are making commendable efforts to improve their condition, and it would be unfair to say that they are not meeting with a degree of success, but the difficulties are so widespread and so firmly planted they are almost insurmountable.

Very much depends upon the education and elevation of the laboring classes, and while something is being done in that direction the full accomplishment is yet far in the future. They are, however, gradually becoming accustomed to the use of improved machinery in cultivation, and that takes them a long distance in advance and opens the way to improvement in other matters.

LEANDER E. DYER.

UNITED STATES CONSULATE,  
Odessa, ——— 18, 1879.

SOUTH RUSSIAN PORTS.

*Value of imports at South Russian ports.*

Ports.	1876.	1878.	Loss in 1878.
Odessa .....	\$36, 973, 325	\$33, 269, 719	\$3, 703, 606
Taganrog and Rostoff, Berdiansk, Yiesk, and Mariopol .....	4, 078, 696	3, 855, 042	218, 654
Nicolaief .....	1, 878, 911	233, 331	1, 645, 580
Total .....	42, 925, 932	37, 358, 092	5, 567, 840

*Quantities of cereals exported from South Russian ports in 1878.*

Ports.	Wheat.	Barley.	Rye.	Corn.	Oats.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Odessa .....	22, 486, 878	9, 908, 952	11, 731, 462	4, 388, 498	2, 873, 316
Taganrog and Rostoff .....	17, 633, 334	2, 711, 472	2, 590, 302	65, 292	102, 372
Berdiansk .....	8, 906, 468	728, 952	141, 060	4, 152	96, 680
Yiesk .....	1, 304, 400	382, 476	74, 400	.....	95, 586
Mariopol .....	2, 293, 140	917, 790	24, 600	.....	.....
Nicolaief .....	12, 928, 020	3, 297, 954	4, 370, 142	.....	429, 492
Total bushels .....	65, 552, 238	18, 087, 596	18, 991, 026	4, 453, 942	4, 458, 420
Total from Odessa in 1876 .....	17, 604, 354	2, 563, 092	3, 026, 424	1, 894, 698	1, 123, 860

Ports.	Linseed.	Rapeseed.	Millet.	Pease.	Beans.	Total.
	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>	<i>Bushels.</i>
Odessa .....	604, 188	1, 474, 146	91, 290	103, 968	1, 910, 556	55, 711, 248
Taganrog and Rostoff .....	5, 932, 692	779, 646	.....	.....	.....	29, 824, 170
Berdiansk .....	106, 686	456, 576	.....	.....	.....	10, 440, 552
Yiesk .....	37, 698	.....	.....	.....	.....	2, 755, 470
Mariopol .....	257, 640	157, 860	.....	.....	.....	3, 651, 090
Nicolaief .....	682, 002	124, 296	21, 960	.....	.....	21, 853, 866
Total bushels .....	7, 620, 816	2, 992, 524	113, 250	103, 968	1, 910, 556	124, 236, 336
Total from Odessa in 1876 .....	246, 756	552, 816	20, 274	110, 240	428, 342	27, 565, 856

*Statement of the values of cereals exported from South Russian ports in 1878.*

Ports.	Year.	Wheat.	Barley.	Rye.	Corn.	Oats.
Odessa .....	1878	\$33,613,441	\$4,986,145	\$8,812,578	\$2,187,400	\$1,074,551
Do .....	1876	27,996,790	1,479,566	2,206,768	1,093,728	546,322
Taganrog and Rostoff .....	1878					
Do .....	1876					
Berdiansk .....	1878					
Do .....	1876					
Yiesk .....	1878					
Do .....	1876					
Mariopol .....	1878					
Do .....	1876					
Nicolaief .....	1878					
Do .....	1876					

Ports.	Year.	Linseed.	Rapeseed.	Millet.	Pease.	Beans.	Total.
Odessa .....	1878	\$906,481	\$1,837,772	\$34,007	\$103,690	\$714,547	\$54,270,612
Do .....	1876	359,288	671,824	14,784	94,219	98,884	34,561,123
Taganrog and Rostoff .....	1878						40,471,178
Do .....	1876						18,434,825
Berdiansk .....	1878						15,312,906
Do .....	1876						6,278,308
Yiesk .....	1878						4,424,420
Do .....	1876						776,424
Mariapol .....	1878						4,140,119
Do .....	1876						2,977,732
Nicolaief .....	1878						14,944,835
Do .....	1876						7,484,413
Total, 1878 .....							133,570,070
Total, 1876 .....							70,512,825
Increase .....							63,057,245

*Comparative statement of the movement of vessels at the South Russian ports in 1876 and 1878.*

Ports.	Arrived, 1876.		Cleared, 1876.	
	No.	Tons.	No.	Tons.
Odessa .....	1,187	939,686	1,158	889,808
Taganrog and Rostoff .....	738	252,993	Unknown.	Unknown.
Berdiansk .....	302	109,059	Unknown.	Unknown.
Nicolaief .....	222	143,776	Unknown.	Unknown.
Yiesk .....	17	4,438	Unknown.	Unknown.
Total .....	2,466	1,449,952		

Ports.	Arrived, 1878.		Cleared, 1878.	
	No.	Tons.	No.	Tons.
Odessa .....	1,730	1,307,622	1,730	1,284,111
Taganrog and Rostoff .....	1,215	406,120	Unknown.	Unknown.
Berdiansk .....	464	131,532	Unknown.	Unknown.
Nicolaief .....	525	355,396	Unknown.	Unknown.
Yiesk .....	127	37,685	Unknown.	Unknown.
Total .....	4,270	2,238,055		

No reports have been obtained of the movements of ships at Mariopol, Sevastopol, Theodosia, Kerch, and Patl, but the shipping has been exceedingly light at those points. Many ships enter and clear at all the South Russian ports which are again entered at other Russian ports. Thus the above, and other statements of the movements of ships, gives an exaggerated number of ships and totals of tonnage.

**SWITZERLAND.**

*Report by Mr. Fish, Chargé d'Affaires at Berne, on the exports from Switzerland to the United States from 1864 to 1879.*

I have the honor to inclose herewith a table published by the Swiss Federal Bureau of Statistics, entitled, "A comparative table of the exportation from Switzerland to the United States in 1879 and during the years 1864 to 1878, inclusive." The table is made from returns furnished by our consular officers.

An examination of the table shows that the value of the exports for 1879 exceed those for 1878 by the amount of 14,943,823 francs, or 27.37 per cent. The only article which does not contribute to this increase is cheese, which shows a decrease in the value of the amount exported of 152,329 francs compared with 1878 (exportation of cheese, 1878, value 1,533,598 francs; of cheese, 1879, value 1,381,269 francs), a diminution equal to 9.93 per cent.

The increase in value of the exportations for 1879 compared with 1878 is thus distributed:

Articles.	Increase in value.	Per cent.
	<i>Francs.</i>	
Musical boxes .....	92,080	96.24
Leather .....	353,908	68.63
Straw and horse-hair goods .....	746,964	92.17
Woolen and cotton goods .....	436,034	57.99
Silks .....	9,772,706	35.41
Watches and watch-works .....	1,296,382	32.44
Embroideries .....	2,233,428	13.38
Miscellaneous .....	162,654	7.36

The value of the total exportation in 1879 compared with the annual average for the years 1864 to 1878 shows an increase in favor of the former of 13,091,222 francs, or 23.19 per cent., divided among the various articles as follows:

*Increase of exportation for 1879, compared with the average annual values of exports during the period 1864 to 1878.*

Articles.	Increase in value.
	<i>Francs.</i>
Leather .....	512,605
Embroideries .....	9,980,183
Silks .....	8,575,948
Miscellaneous .....	775,142

*Decrease of exportation for 1879, compared with the average annual values of exports during the period 1864 to 1878.*

Articles.	Decrease in value.
	<i>Francs.</i>
Watches, watch-works, &c. ....	5,708,294
Woolen and cotton goods .....	778,596
Musical boxes .....	58,579
Straw and horse-hair goods .....	179,765
Cheese .....	27,480

There is, therefore, an increase in the value of the exportation of the first four articles of 19,843,878 francs, or 49.93 per cent., while the last five show a diminution of 6,752,556 francs, or 40.31 per cent.

As regards the total exportation, the year 1879 ranks third among the 15 years included in the table, being surpassed only by the years 1871 and 1872. The same remarks apply equally to the item of silks. The exportations of embroideries were the largest of any previous years, exceeding by two to three million francs the large exportations of 1877 and 1878. Such is not the case in regard to watches, watch-works, &c., the exportation of which, however, exhibits an increase in value of 1,167,236 francs, or 28.30 per cent., compared with the average of the trying years 1876 to 1878, but is still 8,975,238 francs, or 69.91 per cent. below the average of 1870 to 1875, and 5,879,115 francs, or 52.63 per cent., below the average for the period of 1864 to 1869.

The foregoing statistics are given in the table under the head of "observations," but I have thought them of sufficient interest and importance, as exhibiting a gratifying indication of a return of prosperity, to warrant me in embodying them in my dispatch.

That the increased value of exports for 1879 is not spasmodic or temporary is shown by the returns of our consuls for the first quarter of the present year as compared with those for the first quarter of last year, viz:

*Value of exports.*

Consular district.	First quarter of—		Increase in first quarter of 1880.
	1879.	1880.	
Basle .....	\$837,559 75	\$1,275,851 57	\$438,291 82
Geneva .....	66,890 12	72,757 78	5,867 66
St. Gall .....	1,108,719 63	1,275,161 54	166,441 91
Zurich .....	1,857,784 29	1,877,319 32	19,535 03
Total in United States gold .....	3,870,953 79	4,501,080 21	630,126 42

Were the value of exports for the remaining three quarters of the present year to equal that of the first quarter, the value of exports for the calendar year 1880 would exceed those of any previous year by about \$2,250,000 or 13,500,000 francs. There is always, however, a falling off in the other three quarters of the year as compared with the exports for the first quarter; but thus far, as well as I am able to judge, the exports for the present year bid fair to attain the proportions reached in 1871 and 1872 of about 80,000,000 francs, or \$16,000,000 in round numbers.

I invite attention to the large increase in the amount of embroideries now exported to the United States (in 1879 it amounted to 18,923,535 francs) as compared with any previous year (the average from 1864 to 1878 was 8,943,352 francs). I also notice a great increase in the exportation of leather, which, with an average annual exportation of but 361,857 francs during the period of 1864 to 1878, in 1879 reached the sum of 874,462 francs. This increase is due to the large shipments of patent leather from the neighborhood of Lausanne.

The falling off in the exportation of watches has been alluded to above in the language of the Swiss Federal Bureau of Statistics, where it is shown to be for 1879, 33.97 per cent. below the annual average of the period from 1864 to 1878, although increased by 28.30 per cent. as compared with the years 1876 to 1878.

With these figures before us it may be interesting to examine the returns for the period of depression in the watch and watch-works, &c., exportation.

In October, 1878, the Geneva correspondent of the London Times professed to have discovered a feeling of surprise and even indignation in this country caused by a remark alleged to have been made by President Hayes at Toledo, to the effect that New England watches were being sold at the foot of the Alps. If the feeling of surprise or indignation was felt in certain watch-making districts, it did not extend sufficiently beyond the members of the trade to excite general comment in the principal papers of the Swiss press. Judging from the correspondent's refutation of the President's remark, it is evident that he was led into error by the zeal of interested parties. As the speech of the President is reported in the New York Tribune of the 20th September, 1878, he did not claim that we had established a permanent market for American watches in Switzerland, but in alluding to the signs of coming prosperity he spoke of our "*even having gone so far*" as to sell watches, made in Illinois and in New England at the foot of the Alps, where people have been making watches for three hundred years. It is evident that the allusion was to exceptional cases, not to a permanent market.

That the President was justified in his remark there is no doubt, inasmuch as small sales of American watches had been made in Switzerland; at the time he spoke large sales of such watches were being made at the Paris Exhibition, and, among the number sold there, a good many were sold to *Swiss visitors*, according to the statement of the agent of the Waltham Company. The President is likewise sustained by the impartial testimony of Sir Horace Rumbold, at that time British minister to this country, who, in a report to his government, says: "I need not refer to the fact that American watches, made by machinery, are finding their way even to this country." Sir Horace Rumbold was formerly secretary of legation here, and his long acquaintance and careful observation render his opinion particularly valuable.

I am, however, more concerned in showing the condition of the Swiss watch trade with the United States than in vindicating a remark which gave no reason for the attack to which it was subjected.

The correspondent was particularly unfortunate in his assertion that more Swiss watches had been sold in the season of 1878 to American visitors than for *many* years past. From the consular returns from 1872 to 1878, for the years ending on the 30th September of each year, it appears that in the year to which the correspondent referred there were fewer watches sold than for any previous year, except 1877, and that in Geneva the value of those sold was 129,153 francs less in 1878 than for the corresponding year ending September 30, 1877; and that it reached only 552,696 francs, or but little above the fourth part of the average (2,094,327 francs) value of the exports of the corresponding periods from 1872 to 1878, both inclusive, as will be seen from the following:

Years ending September 30—	Total watch exportation from Switzerland to the United States.	Increase or decrease compared with the preceding year.
	<i>Francs.</i>	<i>Francs.</i>
1872.....	18, 200, 108	.....
1873.....	12, 202, 816	— 5, 997, 292
1874.....	11, 770, 576	— 432, 240
1875.....	9, 870, 902	— 1, 899, 674
1876.....	5, 977, 070	— 3, 893, 832
1877.....	3, 477, 985	— 2, 499, 085
1878.....	4, 001, 283	+ 523, 298
Total.....	65, 500, 740	— 14, 198, 825
Average.....	9, 500, 740	— 2, 366, 825

The inaccuracy of the statement of the correspondent as applied to Geneva is even more apparent from an examination of the following table giving the above statistics respecting the watch and watch-work exportation to the United States as divided among the consular districts in Switzerland:

Years ending September 30—	Consular district of Geneva.		Consular district of Basle.		Consular district of Zurich.	
	Total watch exportation to United States.	Increase or decrease compared with preceding year.	Total watch exportation to United States.	Increase or decrease compared with previous year.	Total watch exportation to United States.	Increase or decrease compared with previous year.
	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>	<i>Francs.</i>
1872.....	3,411,053		14,761,230		27,825	
1873.....	3,097,462	— 313,591	9,040,910	— 5,720,320	64,444	+ 36,619
1874.....	2,592,281	— 505,181	9,080,324	+ 39,414	97,971	+ 33,527
1875.....	2,585,870	— 6,411	7,136,649	— 1,943,675	148,383	+ 50,412
1876.....	1,739,078	— 846,792	4,230,267	— 2,906,382	7,725	—140,658
1877.....	681,849	—1,057,229	2,790,611	— 1,439,656	5,525	— 2,200
1878.....	552,606	— 129,153	3,439,732	+ 649,121	8,855	+ 3,300
Total.....	14,660,289	—2,853,337	30,479,723	—11,321,498	360,728	— 18,970
Average.....	2,094,327	— 476,392	7,211,389	— 1,886,916	51,532	— 3,161

Fortunately for the Swiss-watch industry, the years 1878 and 1879 show a steady and marked increase from the low amount exported in 1877 to the United States. The fact remains, however, that owing to the rivalry of American-made watches, and to the past depression in trade, the American consumption of Swiss watches, &c., in 1879 was but 5,292,098 francs in value as compared with an annual average of 11,000,392 francs in the previous fifteen years.

NICHOLAS FISH.

LEGATION OF THE UNITED STATES,  
Berne, May 17, 1880.





# INDEX.

## Vol. II.

### CONTINENT OF EUROPE.

#### SWEDEN AND NORWAY.

	Page.
<b>Sweden:</b>	
Statistical tables: 1. Foreign trade, 1876, '77. 2. Values of same by countries. 3. Freight earned by Swedish vessels. 4. Value of trade for ten years, 1868-'77, and proportion of freight in Swedish and foreign vessels. 5. Cereals and breadstuffs imported, 1876, '77. 6. Same exported. 7. Revenue from customs on imports, 1868-'77, and amounts collected at principal ports .....	1-5
<b>Christiana:</b>	
commerce, 1879: trade with the United States; dullness of trade; tariff; emigration; lumber; railroads .....	5, 6
<b>Gothenburg:</b> (Report by Consul Oppenheim.)	
commerce and industries, 1879; imports from the United States .....	6, 7
railroad speculation .....	7, 8
labor troubles; crops; freight to the United States .....	8, 9
statements of declared trade with the United States .....	9
statement of declared imports of American products from other than United States ports .....	10
statement of navigation at port of Gothenburg, 1879 .....	11

#### DENMARK.

<b>Denmark:</b> (Report by Consul Ryder, Copenhagen.)	
commerce; Danish merchant marine; agriculture .....	12
report on harvest .....	12-14
business revival .....	14-18
statements of exports to the United States, 1879; trade with same, 1875-'78, inclusive; vessels and tonnage plying between the United States and Denmark, 1875-'78, inclusive .....	18, 19

#### GERMANY.

<b>Germany:</b> (Report by Consul-General Kreismann, Berlin.)	
commerce; agriculture; tobacco trade; manufactures; mines and mining; salt statistics; fisheries; woods and forests .....	19-26
German merchant marine: trade; trade with United States; revenues and expenditures .....	26-28
the German railways .....	29
coinage; condition of banks; bank notes .....	30-32
population and emigration; food prices .....	33, 34
<b>Germany:</b> (Report by Consul-General Lee, Frankfort-on-the-Main.)	
agriculture; crops; climate; labor .....	34-37
manufactures: cotton industry; cotton and weaving mills; bands, twists, and cord; buttons and dress ornaments; silk trimmings; velvet; silks; linen cloth, &c .....	37-41
iron and steel; coal; salt; beet sugar .....	41-43
the new tariff: soda; grain; leather; live stock; tobacco; cured and prepared meats; lard; butter and cheese; clover seed; copper .....	43-52
exports to the United States; American trade .....	53, 54
German patent law .....	54, 55
quinine .....	55, 56
United States bonds and credit .....	56, 57

	Page.
<b>Germany—Continued.</b>	
banking: Imperial Bank; co-operative societies; credit societies; con-	
sume societies.....	57-62
new judicial system.....	62, 63
(Supplement to Consul-General Lee's report.)	
manufactures: Bamberg, Angsburg, Heidenheim (Württemberg), Chem-	
nitz, Culmbach, Hamburg, Zittau, &c.; finances of same.....	63-65
iron and steel works: Hamm, Wilhelmshütte, Bochum, Döhlen, Bavaria,	
&c.; finances of same.....	65, 66
mines: Dortmund, Haen, Hartz Coal and Coke Company, &c.; finances	
of same.....	66, 67
banking institutions: Ludwigsburg, Achern, Hofer, &c.; finances of	
same.....	67, 68
miscellaneous: Leipzig, &c.; finances of same.....	68
statements: operations of union co-operative loan societies; consume	
societies; production of starch sugar; retail market prices of produce,	
November 1, 1879.....	69-73
<b>Aix-la-Chapelle:</b> (Report by Commercial Agent Du Bois.)	
commerce and industry.....	73, 74
the woolen industry: knitting-yarns; wool-carding.....	74-76
stove coal; chance for American coal; lead, zinc, and silver industries;	
chemical factories; soap industry; colonists; cigars; iron industry;	
steam-boilers; machinery; needles; leather; building materials.....	76-79
exports to the United States; America the land of promise.....	79
<b>Barmen:</b> (Report by Consul Stanton.)	
trade; commerce; general review of trade.....	80, 81
ammunition, caps, and cartridges.....	81
articles of art.....	82
braiddings, bindings, and trimmings; buttons and button materials;	
dress and piece goods.....	82-84
dyes and chemicals.....	84, 85
hat-bands and ribbons.....	85
metals and manufactures of.....	85, 86
<b>Bavaria:</b> (Report by Consul Wilson.)	
labor and wages.....	87-89
agriculture: wheat; rye; barley; oats; hop export to the United States..	89-92
wine; hops.....	92, 93
imports.....	93, 94
<b>Brake-Nordenham:</b> (Report by Consular Agent Gross.)	
Brake: navigation; exports; general trade; manufactures.....	94, 95
Nordenham.....	95, 96
<b>Bremen:</b> (Report by Consul Grinnell.)	
commerce, 1878; trade with United States; emigration to the United	
States; total imports from all countries.....	96, 97
<b>Breslau:</b> (Report by Consul Dithmar.)	
trade; the crops; prices of grain.....	98-100
the new tariff and the importation of breadstuffs; butter export.....	100
products: iron and steel; coal; zinc; machinery and agricultural imple-	
ments; tobacco; flax.....	100, 101
manufactures: linen goods; cotton; woolen.....	101, 102
miscellaneous: distilleries; breweries; sugar factories; street railways;	
savings banks; co-operative societies; city government.....	102, 103
prices of provisions; rates of wages.....	103, 104
<b>Brunswick:</b> (Report by Consul Fox.)	
trade and industries of Brunswick, Magdeburg, Hanover, and Cassel....	104-107
beet sugar industry.....	107, 108
statistics; business transactions at linen and drilling markets, Hanover,	
1878; leather markets, 1877, 78; principal importations into Magde-	
burg, Hanover, and Cassel, 1878.....	108, 109
<b>Chemnitz:</b> (Report by Consul Griggs.)	
exports to United States, 1879.....	109, 110
<b>Cologne:</b> (Report by Consul Bullock.)	
commerce and industries, 1879; trade outlook; American trade; condition	
of labor; iron trade.....	111, 112
statistics; wages; price of food; exports to United States, 1879.....	112, 113
<b>Crefeld:</b> (Report by Commercial Agent Harte.)	
silk and velvet industry; silk goods; velvets; velvet ribbons.....	113-115
the new tariff.....	115, 116
statistics of velvet and silk industry; number of looms employed, 1876-78;	
exports to the United States, 1875-79.....	116

Germany—Continued.

Dantzic :	
statistics; imports; exports, 1878; navigation, 1879 .....	117, 118
Dresden : (Report by Consul Mason.)	
trade with the United States .....	119
Geestmünde: (Report by Commercial Agent Schoenle.)	
commerce; navigation; industries, 1878, '79; imports .....	119, 120
imports from the United States to Geestmünde and Bremerhaven; statistics, 1877, '78 .....	120
petroleum; statistics, 1877, '78; comparative table, 1874-'78, imports; export in transit .....	120, 121
exports to the United States; statistics, 1877, '78 .....	121
general trade, 1878; statistics .....	121
miscellaneous; wages; fisheries; wood trade; ship-building .....	122
statistics; exports to the United States, 1879 .....	123
American imports and import duties; petty smuggling .....	123-125
Hamburg :	
statistics of commerce, 1877, '78; imports by articles .....	125, 126
imports by countries; recapitulation .....	127-129
exports .....	130
trade with United States; statistics of imports, 1878 .....	130-132
sea-vessels, arrival and departure, 1877, '78 .....	133, 134
navigation, 1877, '78 .....	135
navigation between Hamburg and the United States, 1878 .....	136
emigration; nativity and destination of emigrants via Hamburg; statistics .....	137, 138
Königsberg: (Report by Vice-Commercial Agent Saedeke.)	
commerce; grain export, 1878; statistics; trade with the United States; navigation; grain trade, 1879 .....	139, 140
statistics of trade; imports, 1878 .....	140, 141
exports; exports to the United States, 1879 .....	142, 143
Leipsic : (Report by Consul Montgomery.)	
commerce and industries, 1879 .....	143, 144
Mannheim : (Report by Consul Smith.)	
condition of trade, 1879; trade with the United States; details; the crops; the rhinderpest; miscellaneous .....	145-147
Mayence : (Report by Consular Agent Heidelberger.)	
vintage; wine trade; statistics for last thirty years; present prices; trade with the United States .....	147-149
Sonneberg : (Report by Consul Winsor.)	
industries; trade with the United States .....	149-152
wages, &c. ....	152, 153
the legion of tramps .....	153-155
hints to American exporters .....	155, 156
the new German tariff .....	156, 157
opposition to American sewing-machines; art, industry, and agriculture; the harvest .....	158, 159
manufactures of cotton hosiery and gloves .....	159-166
meteorological; statistics of exports to the United States, 1879 .....	166, 167
Stettin : (Report by Commercial Agent Burckhardt.)	
trade with the United States; exports to the United States; general commerce and navigation .....	167, 168
statistical tables of imports, 1878 .....	169-171
same of exports .....	172-174
same of navigation .....	175
Württemberg: (Report by Consul Potter, Stuttgart.)	
Continued trade depression; trade with the United States; importations of builders' hardware, &c.; feathers and hair for mattresses; wood for tool-handles; glassware; small machinery for farm and domestic use; jewelry; American watches; stationery; cutlery; canned meats; petroleum; starch; stoves .....	175-180
agriculture; the grape crop of 1879 .....	180, 181

NETHERLANDS.

Netherlands: (Report by Consul Eckstein, Amsterdam.)	
commerce and industries; introductory remarks; crop prospects, 1879; flower roots; bulbs; the grain trade; timber; tobacco; petroleum; diamonds .....	182-188

## Netherlands—Continued.

banks; joint stock companies; Bank of the Netherlands; rates, &c.; India Commercial Bank; new loans negotiated at Amsterdam; American securities; exchange .....	188-191
the North Sea Canal; statistics of monthly traffic; public improvements .....	191-195
statistics of trade with foreign countries; navigation between the Netherlands and the United States, 1878 .....	195, 196
Rotterdam: (Report by Consul Winter.)	
the grain trade; cotton; tobacco; beef; pork and lard; exports to the United States .....	196-199
navigation; emigration; imports from the United States; statistics of exports to the United States; statistics of navigation by nationality and tonnage; navigation by countries .....	199-201
Schiedam and Vlaardingen:	
Exports to the United States, 1879 .....	201

**BELGIUM.**

## Belgium: (Report by Consul Wilson, Brussels.)

depression in manufacturing industries; agriculture; statistics; imports from the United States .....	202-205
industries; coal; blast-furnaces; steel; rolling-mills; manufactories .....	205, 206
American products and Belgian manufactures .....	206, 207
(Supplement to foregoing.)	
imports from the United States as compared with those of other countries; statistics of Belgian commerce .....	208-211
Antwerp: (Report by Consul Steuart.)	
explanation of tables; increase of commerce; statistics of trade .....	212-214
navigation; arrivals by flag; American vessels; emigration; exports to the United States .....	214-217
population; marriages, births, and deaths; improvement of Antwerp .....	217
trade with the United States; statistics for three years; grain and flour; meat; petroleum, statistics, 1876-'78; resin; spirits of turpentine; tobacco; lard; cotton .....	217-220
exports; commerce for nine months, 1879 .....	220
statistics; imports at Antwerp, 1878 .....	221-231
special exports, 1878 .....	231-239
commerce of transit .....	239, 240
navigation, 1879 .....	241, 242
exports to the United States, 1877, '78 .....	242
navigation of American vessels, 1878 .....	243
direct general imports from the United States .....	243, 244
direct general exports .....	245, 246
navigation between the United States and Belgium, 1878; exports to the United States, 1879 .....	246, 247

**GREAT BRITAIN AND IRELAND.**

## Great Britain and Ireland: (Report by Consul-General Badeau, London.)

commerce and industries of the United Kingdom, 1878 and 1879; trade improvement; agricultural productions; mines; navigation; imports; exports; customs duties; trade with the United States; revenue and expenditure; population; emigration; education; the poor .....	247-252
national debt; Bank of England; post-office and telegraph; railways; exports to the United States .....	252-254
summary of trade of Belfast, Birmingham, Bradford, Bristol, Cardiff, Cork, Dublin, Dundee, Dumferline, Falmouth, Glasgow, Hull, Leeds, Leith, Liverpool, London, Londonderry, Manchester, Newcastle, Nottingham, Plymouth, Sheffield, Southampton, Tunstall; recapitulation of declared exports .....	254-266
statistics of exports to the United States, 1878, '79; increase and decrease; summary; agriculture; area under cultivation; number of live stock; mines; coal and metals produced, 1877, '78; navigation; principal branches of expenditure, &c. ....	267-271

**ENGLAND.**

Birmingham:	
exports to the United States, 1879 .....	271
Bradford:	
exports to the United States compared with those of 1878 .....	272

Great Britain and Ireland—Continued.

Bristol: (Report by Consul Canisius.)	
trade with the United States; effect of American competition on agriculture and manufactures; exports to the United States; imports from the United States; steam communication with the United States....	272-274
decadence of American shipping; imports of live stock; British <i>vs.</i> American agriculture and manufactures.....	274-278
statistics of exports to the United States; number, tonnage, and nationality of vessels; arrivals of American vessels at Bristol and Gloucester during last twenty years; cattle from the United States landed at Bristol and Avonmouth, 1878, '79.....	278, 279
Falmouth: (Report by Consul Fox.)	
Cornish mines; the Pilchard fishery; the harvest; navigation; humidity of the air; exports to the United States .....	280-283
Gloucester: (Report by Commercial Agent Farrell.)	
the port; the "wiping out" of the American carrying trade; imports of timber and deals; imports and price of grain; wages; export of salt.	283-286
Hartlepool: (Report by Consular Agent Nilsen.)	
trade with the United States.....	286
Hull: (Report by Commercial Agent Driggs.)	
history; population; shipping; railways; average health; death rate; suburbs; public buildings; improvements; the river Humber; steam communication with the United States; emigration; quarantine; customs revenue; fishing vessels .....	287-291
trade and manufactures; mines; agriculture; wages and cost of living; foreign consular representation; summary of business of United States consulate for past year .....	291-294
statistics of imports; navigation; exports .....	294-298
Leeds:	
exports to United States .....	298, 299
Liverpool: (Report by Consul Packard.)	
trade and commerce; navigation; ship-building; customs revenue; docks; foreign animals; wharves, &c.....	300, 301
statistics of navigation; general; classified by flag; from 1874-78; ship-building from 1874-78 .....	301-304
comparative statement of produce of the United Kingdom, 1877 and 1878; foreign and colonial produce exported; exports to United States, 1879; comparison of total exports, 1878, '79.....	305-311
London: (Report by Consul-General Badeau.)	
trade and commerce for 1878 and 1879; imports, 1878; exports: 1, produce of Great Britain and Ireland; 2, of foreign and colonial produce; navigation, 1878; by countries; coastwise; exports to the United States, 1879; same, 1878, '79; decrease or increase .....	312-320
Manchester: (Report by Consul Shaw.)	
review of trade; exports to the United States, 1879; wages of operatives at Lancashire, Oldham, and Blackburn mills; carpenters and masons; farm laborers .....	320-323
house rents; retail prices of provisions; English taxes, local and general; factory statistics; returns of textile factories for Great Britain; why Lancashire is the center of the cotton industry; present depression; strikes .....	323-327
American beef and mutton; butter and cheese.....	327
emigration .....	327-329
Newcastle-upon-Tyne: (Report by Consul Jones.)	
commerce; industries; trade with the United States; American <i>vs.</i> British agriculture; iron and coal trade; statistics of mineral produce of United Kingdom, 1878; coal and iron, 1877, '78; pig-iron manufactured; coal used; iron export; import; coal produce in Northumberland and Durham; shipment of coal, 1877, '78; total shipment of coal and coke from Northumberland, Durham, and Middlesborough, 1878; Tyne (Newcastle, North and South Shields); wages in Northumberland and Durham coal mines, &c .....	329-334
ship-building and shipping; ships built in United Kingdom, 1877, '78; ships built on the Tyne; cleared from the Tyne; classification, 1874-78; import and export trade .....	335-337
imports (exclusive of coal and coke), coastwise and over sea, 1878; exports; exports from Newcastle and agencies, viz, Sunderland, Hartlepool, and Carlisle, to the United States, by quarters, 1878, '79; price-list of exports; value, 1879 .....	338-344

	Page.
Great Britain and Ireland—Continued.	
Nottingham :	
exports to the United States .....	344
Plymouth : (Report by Consul Fox.)	
commerce; industries; imports; navigation; exports .....	345, 346
Sheffield : (Report by Consul Webster.)	
depression of trade; competition of American manufactures; increased exports to the United States; distress among working classes; emigration societies; American competition; imports of American food products .....	346-348
statistics; exports to the United States .....	348, 349
Southampton :	
exports to the United States .....	349
Tunstall :	
exports to the United States .....	350

## IRELAND.

Belfast : (Report by Consul Dounan.)	
trade; commerce; exports to the United States; imports; an American house wanted; population, &c .....	350-352
Cork :	
exports to the United States .....	352
Dublin :	
exports to the United States .....	353
Londonderry :	
exports to the United States .....	353

## SCOTLAND.

Aberdeen : (Report by Consul Ramsay.)	
trade; navigation; population .....	354, 355
Dundee : (Report by Consul McDougall.)	
commerce; industries; jute trade; linen trade; paper stock .....	355-360
ship-building; whale and seal fishing; statistics; herring fishing .....	360-362
engineering and iron-working trades; house building; leather; boot and shoe making; marmalade and confectionery making .....	362, 363
imports from the United States; fresh beef; canned meats; fish; joinery; agricultural and horticultural implements .....	363-365
agricultural depression; railways; statistics of trade, years ending May, 1878, '79; navigation; statistics of shipping .....	365-370
the Tay bridge; the Forth bridge .....	370, 371
United States investment companies; libraries; unemployed in Dundee; savings bank; water supply; gas-works; crime; prison aid society; tramways; valuation of burgh; voters; health and sanitary condition; sailors' home, &c.; Glasgow bank liquidation; Scotch bank shares; applications from United States manufacturers; commercial and scientific journals; exports to United States from Dundee and Aberdeen .....	371-379
Dunfermline :	
exports to the United States .....	379
Glasgow : (Report by Consul Cooper.)	
trade; industries; increased exports to the United States; general dullness of trade; the cry for work and bread; ship-building on the Clyde; sugar imports; general exports; imports from the United States; absence of American shipping; statistics of trade with the United States; navigation; tonnage .....	380-384
Leith : (Report by Consul Robeson.)	
trade, commerce, with the United States; agriculture; reduction of wages; emigration .....	384-386
statistics; imports; résumé; exports; recapitulation; navigation; exports to the United States .....	386-391

## WALES.

Cardiff : (Report by Consul Sikes.)	
trade; transactions; exports to the United States .....	391, 392

**FRANCE.**

Page.

<b>France:</b> (Report by Consul-General Fairchild, Paris.)	
commerce; navigation; industries; finances; statistics of imports, by countries of origin, 1877, '78; by articles; exports by destinations; by articles; by custom-houses; diagrams of raw and manufactured articles in commerce .....	393-398
trade with the United States; statistics of trade, 1877, '78; recapitulation, 1873-78 .....	398-402
navigation; tonnage between France and the United States, 1878; condition and employment of mercantile marine; fisheries .....	402, 403
railways; canals; coal mines; metal products; wine product, 1877, '78; cider; alcohols; silk; sugar; imports and exports of sugar; wheat product, &c .....	403-407
Bank of France; national debt; taxes; budget, 1879; proposed budget, 1880; army; navy .....	407-412
miscellaneous; electoral statistics; patents; mint; forests; life insurance; fire insurance .....	412, 413
<b>Bordeaux:</b>	
commerce .....	414, 415
<b>Dunkirk:</b>	
commerce with the United States; navigation .....	416, 417
<b>Havre:</b> (Report by Consul Bridgland.)	
commerce; navigation, 1878; cotton; wool; coffee; hides; rum; indigo; sugar; petroleum; wheat; maize; hog product; increase in navigation; British and American; statistics by flag; by countries .....	417-427
<b>La Rochelle:</b> (Report by Consul Catlin.)	
trade; the phylloxera; vintage, 1879; spurious brandy; American wheat; the port; the porcelain trade .....	428-432
statistics, trade; navigation .....	432-435
<b>Lyons:</b> (Report by Consul Peixotto.)	
review of the silk market; frauds and undervaluation; remedy .....	436-441
treaty of commerce with the United States; import trade .....	441, 442
tabular statements, exports to the United States; silk goods to other countries, 1868-'77 .....	442, 443
statistics of silk trade from 1827-'77 .....	444
exports of silk goods, 1868-'77; silk goods manufactured, 1876-'78; production of raw silk, 1875-'78; exports to the United States, 1879; same, 1869-'79; official quotations, 1878 .....	445-447
<i>résumé</i> of silk commerce, 1878, '79; comparative prices, 1876-'80; same, 1865-'79; silks received and conditioned for market, 1870-'79; trade, 1873-'79; fluctuation in prices, 1879 .....	448-451
<b>Marseilles:</b> (Report by Consul Gould.)	
the old port; the new port; financial embarrassments; statistics, imports. statistics, exports; navigation .....	451-457
<b>Nantes:</b>	
statistical tables, commerce; navigation .....	458-462
<b>Nice:</b> (Report by Consul Nesey.) 1878, '79.	
statistics, commerce; navigation .....	463-466
<b>Paris:</b>	
budget, 1879; receipts of octroi, 1877, '78 .....	466-470
<b>Rouen:</b> (Report by Commercial Agent Rhodes.)	
trade with the United States .....	470, 471
	471, 472

**SWITZERLAND.**

<b>Switzerland:</b> (Report by Vice-Consul Doerr, Basle.)	
commerce; industries; ribbon manufacture; raw-silk trade; floret spinning; wool; dyeing .....	472-475
watches; machinery; iron trade; customs; railways; statistics of earnings .....	475-478
<b>Basle:</b>	
exports to the United States .....	478
<b>Geneva:</b> (Report by Consul Adams.)	
trade; industry; manufactures; trade with the United States; population; stock census; area of productive lands; exports to the United States .....	479-481
<b>Saint Gall:</b>	
exports to the United States .....	481, 482
<b>Zurich:</b> (Report by Consul Byers.)	
vintage; food prices .....	482, 483



**SPAIN.**

Alicante:	Page.
exports to the United States .....	483
Barcelona: (Report by Consul Schenck.) 1878 to July, 1879.	
trade; commerce; importations of special articles; the harbor; statistics, American shipping; Spanish; foreign (exclusive of American and Spanish); exports to the United States; coal imported .....	483-486
Cadiz:	
commerce; navigation; exports to the United States .....	487-491
Valencia:	
exports to the United States .....	491
Malaga and all Spain: (Report by Consul Quarles.)	
trade; industries of Malaga; commerce of Spain, &c.; commercial depression .....	491
principal exports; imports of American goods; export of fruit to the United States; <i>résumé</i> ; distribution to American cities .....	492-495
commerce of Spain, Peninsula and Balearic Islands; statistics; general shipping .....	495-498
agricultural interests; raisin crop; the phylloxera; olive oil; wine; sugar .....	498-500
public works; railways; population; health .....	500-502
Tarragona:	
exports to the United States .....	502

**GIBRALTAR.**

Gibraltar: (Report by Consul Sprague.)	
navigation; imports from the United States; statistics of navigation ....	502-504

**PORTUGAL.**

Fayal: (Report by Consul Dabney.)	
trade, commerce; statistics, trade; navigation .....	505-508

**ITALY.**

Italy: (Report by Consul-General Schuyler, Rome.)	
foreign commerce; statistics, 1877, '78; by countries, 1878; with the United States; bottom imported; trade, 1879 .....	508-515
navigation; comparative table, 1873-'78; foreign and coastwise, 1877, '78; mercantile fleet, 1874-'78; shipwrecks .....	515-518
agriculture .....	518-520
finances; Italian debt; debt of cities; the currency; agio on gold, 1877, '78; same, January, 1880; railways; posts; telegraphs; lotteries; savings banks; emigration .....	520-528
Florence: (Report by Consul Crosby.)	
agriculture; phylloxera; forests and trees .....	528, 529
commerce; revenues; miscellaneous; general remarks; statistics; exports; cocoon market .....	529-532
Genoa: (Report by Consul Hazelton.) 1878, '79.	
trade with the United States; navigation .....	532-535
improvements in Savona; harvests, 1879; exhibition; wheat from the United States; duties on sugar; statistics, commerce; exports to the United States; shipbuilding .....	535-539
Leghorn: (Report by Consul Masi.)	
commerce; imports from the United States; statistics, commerce with the United States; navigation .....	540-547
Messina: (Report by Consul Owen.) 1878.	
commerce; navigation; crops; public works; agencies; Syracuse; Gioja .....	547, 548
statistics, commerce; navigation .....	549-551
Palermo: (Report by Consul Bayly.)	
industries; condition of Sicily; population; mineral products; railways; agriculture; condition of the consulate .....	551-554
statistics, commerce, 1879; same, 1877-'79; shipping; exports to the United States, 1879; imports from same, 1877-'79; commerce with the United States, 1877-'79; American shipping .....	555-558

**MALTA.**

Malta: (Report by Vice-Consul Eynaud.)	
commerce; American tobacco; petroleum, &c.; exports; navigation .....	558-560

**AUSTRIA-HUNGARY.**

	Page.
Austria-Hungary: (Report by Consul-General Weaver, Vienna.) 1878, '79.	
imports; exports, 1876-'78; balance of trade; entry duties; source of imports; tariff; exports to the United States.....	561-564
navigation; entry and departure of vessels, 1878; by nationalities; merchant marine; movement of Austrian vessels.....	564, 565
post-offices; telegraphs; coinage; internal-revenue stamps; budget for 1879; public debt; vital statistics of Vienna; market prices; general remarks.....	565-569
statistics, commerce, 1878; commerce and duties, 1877, '78; exports to the United States, 1879; navigation by ports; by nationalities; mercantile marine; carrying trade of same, 1879; business transacted by post-office department; by telegraph offices .....	570-578

**GREECE.**

Greece: (Report by Consul Hancock, Patras.)	
trade; commerce with the United States; shipping; general trade; public works .....	579-583

**TURKISH EMPIRE.**

Turkish Empire: (Report by Consul-General Heap.)	
trade; commerce; lack of statistics; internal communication; condition of Asia Minor; imports from the United States; American steamships wanted; British steamships; navigation; our carrying trade in foreign hands; steam <i>vs.</i> sailing vessels; projected harbor improvement in Constantinople; Roumania; Bulgaria; trade with United States..	583-587
commerce of Constantinople; statistics, navigation; trade with the United States .....	587, 588

**ROUMANIA.**

Roumania: (Report by Consular Agent Stern, Bucharest.)	
independence; territory; population; production .....	588-590
trade; commerce; imports; communication .....	590-592
finances; education; laws and justice; conclusion .....	592, 593
statistics; imports; exports; cereals exported .....	594-596

**RUSSIA.**

Russia: (Report by Consul-General Edwards, St. Petersburg.) 1877, '78.	
disturbed condition of the country; plague in south; secret societies affecting commerce.....	597, 598
agricultural tools, &c.; American <i>vs.</i> Russian agricultural productions; how to introduce American machinery .....	598, 599
statistics of principal commodities of commerce.....	599, 600
schedule of duties on importations .....	600-606
telegraph statistics, 1866-'76 .....	606
Azoff ports:	
commerce; navigation .....	607, 608
Nicolaieff:	
commerce; navigation, 1878.....	609
Odessa: (Report by Consul Dyer.) 1878.	
trade; commerce; exports; imports; cotton; petroleum; statistics, commerce; navigation .....	610-616
Odessa and the South Russian ports: (Annual report, 1879.)	
Odessa; the Azoff ports; Nicolaieff; extension of American trade; duty on machinery .....	616-618
Mr. G. M. Hoyland's report: commerce at Odessa; navigation at Odessa; statistics; commerce at Azoff ports; Taganrog; Rostoff; Berdiansk; shipping; commerce at Nicolaieff; navigation; comparative navigation of South Russian ports; totals of grain, &c .....	618-627
Poland: (Report by Consul Rawicz, Warsaw.)	
navigation; exports; imports .....	627-629
agriculture; banking; railroads .....	629-635
statistics; imports, 1876; exports .....	636-640

**Poland—Continued.**

	Page.
Warsaw :	
industry, 1877; town and government .....	640, 641
Kalish :	
statistics; industry .....	641, 642
Petrokow :	
industry .....	642
Lublin :	
industry .....	643
Radom .....	643
Kielce .....	644
Plock .....	644
Lomza .....	644, 645
Siedlce .....	645
Suwalki .....	645
recapitulation .....	646
agricultural produce sown, reaped; population; cattle disease; sugar produce; educational statistics; price of food in Warsaw market....	646-649
Reval : (Report by Consular Agent Mayer.)	
increase in import trade; export trade; crops .....	649, 650
statistics; imports; exports; navigation.....	651-657

**POLYNESIA.****HAWAIIAN ISLANDS.****Hawaiian Islands: (Report by Consul Morton, Honolulu.)**

commerce; industries; sugar; letters on non-utilized land suited to pro- duction of sugar, &c .....	658-664
rice product; other products; coffee .....	664-666
labor; immigration; education; census; revenues; expenditures; value of real and personal property; public funded debt .....	666-672
statistical tables of commerce; with the United States, 1875-79 .....	672-676

**SOCIETY ISLANDS.****Tahiti: (Report by Consul Atwater.)**

trade; industries; navigation statistics .....	676, 677
--	----------

# SUPPLEMENT.

## METEOROLOGICAL REPORTS.

	Page.
Circular calling for same .....	681
Africa :	
Sierra Leone .....	681
America :	
Brazil : Santos .....	682
Australia :	
Victoria : Melbourne .....	682
Europe :	
Norway : Christiania, Gothenburg .....	683, 684
Sweden :	
Sundry places .....	684
Germany :	
Barmen .....	685-687
Berlin and Frankfort-on-the-Oder .....	688
Breslau .....	688
Chemnitz .....	689
Cologne .....	689
Crefeld .....	690
Frankfort-on-the-Main .....	690, 691
Mannheim .....	692
Nuremberg .....	692
Stuttgart .....	693
The Netherlands :	
Sundry places .....	694
Belgium :	
Brussels .....	695, 696
The United Kingdom :	
Ballymena, Belfast .....	697
Bradford .....	698-702
Bristol .....	703, 704
Cardiff .....	704, 705
Dundee .....	705, 706
Glasgow .....	706
Greenwich .....	707
Nottingham .....	707
Liverpool .....	708
Newcastle .....	708
France :	
Bordeaux .....	709
Rochefort .....	709
Marseilles .....	709
Nice .....	710, 711
West of France .....	712
Switzerland :	
Berne .....	712, 713
Spain :	
Barcelona, Malaga .....	714
Italy :	
Florence .....	715, 716
Leghorn .....	716
Palermo .....	716, 717
Rome .....	717
Austria :	
Vienna ; Ische and Gratz .....	718
Warsaw .....	718

## MISCELLANEOUS REPORTS.

	Page.
Austria: (Special report by Minister Kasson.)	
Productive Value of Land in Austria.....	719, 720
China: (Special report by Consul Lincoln, of Canton.)	
Cultivation of the Sugar-Cane: sorghum; manufacture of rock candy; detail thereof; distilling process of same; grades.....	721, 722
The Manufacture of Matting: planting the grass; weaving; mats, sails, &c.; several brands of dealers; looms for same; drying; shrinkage; particulars of manufacture.....	722-725
Denmark: (Report of lecture by Professor Fjord; translated by Consul Ryder.)	
Butter Making: ice-houses; temperature variations; casks; comparative differences in manufactures thereof; calculation of loss; statistics; experiments in different ice-houses, compartments; how to prevent butter from injury by heat; artificial cooling; exhibition of same in summer; shipping same; markets.....	725-732
(Supplementary report by Consul Ryder.)	
The Production of Butter in Denmark: careful analysis of the subject; important suggestions to butter manufacturers; experiments reviewed; care in milking; fodder; heavy milk; grass, &c.; centrifugal system; trials at Skagelse; tub system; 900 revolutions per minute, &c., by centrifuge; yield; fatty substance; Danish Government providing funds for developing this industry.....	733-736
France: (Historical report by Consul Peixotto, of Lyons.)	
Industries and Manufactures: industries of the Rhone and Loire; 1793; view of the past; trade development; anarchy; labor riots; "work or death;" tariff; deluge; émeute and result; ruin of work; new epoch; "peace and labor;" trade and prosperity; language; religion; mortality; education; agriculture; railways; manufactures; commerce.....	737-744
water supply, past and present; silk industry; instruction.....	744-746
Germany: (Translation by Consul-General Kreismann, of Berlin.)	
The German Tariff: complete review and analysis; detailed copy of act, approved July 15, 1879.....	746-750
(Special report by Consul Potter, of Stuttgart.)	
Beet-Root Sugar: growth of the industry; means of introducing same into the United States; analysis of manufacture; the beet plant; origin of the industry, 1747; its development and success; danger of heating; statistics of production; yield of Europe; great advantages for the industry in the United States.....	759-765
(Supplementary report by Consul Potter.)	
Beet-Root Sugar Machinery and Manufactories: estimate of cost for machinery, &c.; fitting up; capacity of 100,000 kilograms daily; also 500,000 kilograms; statistics of working power; molasses and sugar; official data for the manufacture thereof.....	765-771
(Report by Consul Fox, of Brunswick.)	
Beet-Root Sugar and Protection to Employés: the production in Brunswick; working power; results; petition of industrial establishments; laws for working manufactories; to be left to a commission of practical men.....	771, 772
(Report by Consul Potter, of Stuttgart.)	
Technical Education: royal technical high school university; values of degrees; the building; institution; staff; system; polytechnic and technical divisions; simplification and improvement; technical, compared with the polytechnical course; statistical information; professors; students; branches of study; attendance; nationalities of students; ages; stipends; basis of degrees compared with degrees of the United States; disparagement to the latter encouraged; high-sounding titles for effect, in Europe.....	773-784
(Special report by Consul-General Lee, of Frankfort-on-the-Main.)	
New Prussian Orthography: measures to uniform spelling; ministry; institutions and all channels used to establish the new form.....	784, 785
review of the subject; past and present orthography; phonetic principle; working of same; hopes; illustrations; rule books.....	785-788

Germany—Continued.

(Special report by Consul-General Lee.)

Silk Culture in Germany: statistics of the breeding of worms; manufacture; culture of the mulberry tree; first silk association; gradual development where the industry flourishes; data from all parts of Germany; total value of trade; spooling, &c. .... 788-792

England: (Special report by Consul Jones, of Newcastle-upon-Tyne.)

The Iron Industry: review of the trade and conditions of people; statistics of works; furnaces, &c., closed; new process; ore into steel; statistics; steel, king; steel ships; the great future industry ..... 792-797

(Special report by Consul Shepard, of Bradford.)

The Revival of Trade; land question; patent laws; post-office savings banks; revival; iron industry; fluctuations; London, the great money center; New York, the great market; increased demand from the United States; England and America in industrial rivalry ..... 797-799

Land: value; farmers; past and present; why the bad change of railroad in Canada to help the English farmer; what to become of the farms ... 799-801

Patent Laws: particulars and fees ..... 801, 802

Post-Office Savings Banks: principles of same; working ..... 802, 803

Ireland: (Special report by Consul Barrows, of Dublin.)

The Irish Land Question; Ulster tenant-right custom; compensation for improvement, by tenant, preceding tenant, and for change with good will; tenant-right usages; poor-rate element; tenant-right legislation; land customs of Channel Islands; condition of small farmers ..... 803-811

Italy: (Seven reports by Consul Crosby, of Florence.)

Sundry Industries: American Flower and Vegetable Seeds: Cultivation of Wheat Straw; and manufacture of straw goods ..... 812-816

How American Patrons of Art are Defrauded ..... 816

Borax a Substitute for Salt in Preserving Butter ..... 818

Production and Consumption of Salt ..... 819

Steel Rails ..... 823

Tariff; general and conventional ..... 825-833

(Report by Consul Crain.)

Raw Silk Industry of Milan ..... 835

Mexico: (Special report by Consul Trowbridge, of Vera Cruz.)

Tariff and Contraband Laws: tariff; advice to American shippers; revision of laws ..... 835-839

American vessels in ports; contraband law; storage ..... 840-843

Portuguese Possessions: (Report by Consul Newton.)

Saint Paul de Loanda: trade; commerce; coffee; palm oil; palm kernels; peanuts; wax; rubber; ivory; cotton; orchilla; gum copal; liconde; native provisions exchange; public works; emigration .... 843-850

Russia: (Report by Consul Dyer, of Odessa.)

Products, Manufactures and Habits of South Russia: manufactures; habits and customs of the working classes; of landed proprietors; loading ships; currency; "backshish" ..... 850, 856

statistics of trade values; shipping ..... 856-857

Switzerland: (Report by Mr. Fish, chargé d'affaires, of Berne.)

articles sold to the United States; values of total trade; comparative tables; the great watch trade ..... 858-861















Widener Library



3 2044 105 536 007